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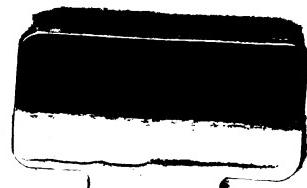
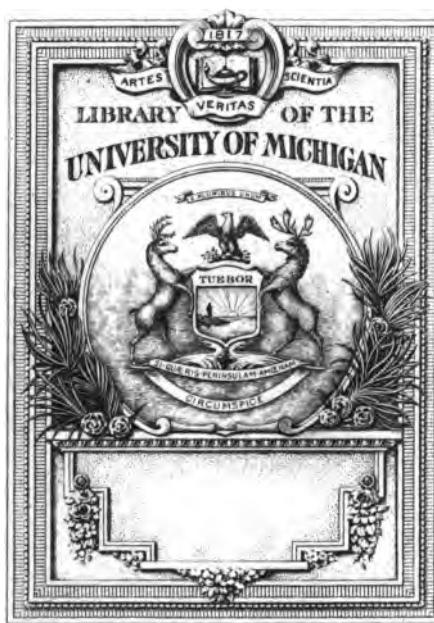
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FIFTEENTH BIENNIAL REPORT  
OF THE  
NORTH CAROLINA  
STATE BOARD OF HEALTH

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1913-1914



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FIFTEENTH BIENNIAL REPORT

OF THE

NORTH CAROLINA

STATE BOARD OF HEALTH

1913-1914



By Transfer

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## **Members of the State Board of Health**

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### **Elected by the North Carolina Medical Society:**

**THOMAS E. ANDERSON, M.D., Statesville.**  
Term expires 1917.

**CHAS. O'H. LAUGHINGHOUSE, M.D., Greenville.**  
Term expires 1917.

**A. A. KENT, M.D., Lenoir.**  
Term expires 1919.

**CYRUS THOMPSON, M.D., Jacksonville.**  
Term expires 1919.

### **Appointed by the Governor:**

**J. L. LUDLOW, C.E., Winston-Salem.**  
Term expires 1915.

**J. HOWELL WAY, M.D., Waynesville.**  
Term expires 1917.

**W. O. SPENCER, M.D., Winston-Salem.**  
Term expires 1917.

**RICHARD H. LEWIS, M.D., Raleigh.**  
Term expires 1919.

**EDWARD J. WOOD, M.D., Wilmington.**  
Term expires 1919.

## Whole-time County Health Officers

---

New Hanover .....	Chas. T. Nesbitt.....	Wilmington.
Robeson .....	B. W. Page.....	Lumberton.
Durham .....	Arch Cheatham.....	Durham.
Guilford .....	W. M. Jones.....	Greensboro.
Johnston .....	H. H. Utley.....	Smithfield.
Rockingham .....	S. W. Hurdle.....	Reidsville.
Forsyth .....	E. F. Strickland.....	Winston-Salem.
Sampson .....	G. M. Cooper.....	Clinton.
Columbus .....	G. S. Cox.....	Tabor.
Buncombe .....	D. E. Sevier.....	Asheville.
Nash .....	B. E. Washburn.....	Nashville.
Vance .....	D. C. Absher.....	Henderson.

## County Physicians

---

Alamance .....	Geo. W. Long.....	Graham.
Alexander .....	S. T. Crowson.....	Taylorsville.
Alleghany .....	J. L. Doughton.....	Sparta.
Ashe .....	J. W. Colvard.....	Jefferson.
Beaufort .....	E. M. Brown.....	Washington.
Bertie .....	John L. Pritchard.....	Windsor.
Bladen .....	L. B. Evans.....	Clarkton
Brunswick .....	J. A. Dosher.....	Southport.
Buncombe .....	D. E. Sevier.....	Asheville.
Burke .....	E. W. Phifer.....	Morganton.
Cabarrus .....	R. M. King.....	Concord.
Caldwell .....	C. B. McNairy.....	Lenoir.
Camden .....	C. G. Ferebee.....	Shiloh.
Carteret .....	C. S. Maxwell.....	Beaufort.
Caswell .....	S. A. Malloy.....	Yanceyville.
Catawba .....	H. E. Rowe.....	Newton.
Chatham .....	L. E. Farthing.....	Pittsboro.
Cherokee .....	J. N. Hill.....	Murphy.
Clay .....	J. M. Sullivan.....	Hayesville.
Cleveland .....	T. E. McBrayer.....	Shelby.
Columbus .....	G. S. Cox.....	Tabor.
Craven .....	J. F. Rhem.....	New Bern.
Cumberland .....	Wm. S. Jordan.....	Fayetteville.
Currituck .....	S. M. Mann.....	Moyock.
Davidson .....	E. J. Buchanan.....	Lexington.
Davie .....	J. W. Rodwell.....	Mocksville.
Duplin .....	J. M. Farrior.....	Kernersville.
Durham .....	Arch Cheatham.....	Durham.

Edgecombe .....	W. W. Green.....	Tarboro.
Forsyth .....	E. F. Strickland.....	Winston-Salem.
Franklin .....	J. E. Malone.....	Louisburg.
Gaston .....	L. N. Glenn.....	Gastonia.
Gates .....	G. D. Williams.....	Gatesville.
Graham .....	Geo. F. Brock.....	Tuskegee.
Granville .....	Samuel D. Booth.....	Oxford.
Greene .....	W. B. Murphy.....	Snow Hill.
Guilford .....	W. M. Jones.....	Greensboro.
Halifax .....	I. E. Green.....	Weldon.
Harnett .....	J. W. Halford.....	Lillington.
Haywood .....	J. R. McCracken.....	Waynesville.
Henderson .....	A. B. Drafts.....	Hendersonville.
Hertford .....	George Harrell .....	Murfreesboro.
Hoke .....	G. W. Brown.....	Raeford.
Hyde .....	R. E. Windley.....	Swan Quarter.
Iredell .....	A. Campbell .....	Statesville.
Johnston .....	H. H. Utley.....	Smithfield.
Jones .....	C. S. Barker.....	Trenton.
Lee .....	J. P. Monroe.....	Sanford.
Lenoir .....	A. D. Parrott.....	Kinston.
Lincoln .....	C. D. Thompson.....	Lincolnton.
Madison .....	Chas. N. Sprinkle.....	Marshall.
Martin .....	W. E. Warren.....	Williamston.
McDowell .....	G. B. Justice.....	Marion.
Mecklenburg .....	C. S. McLaughlin.....	Charlotte.
Mitchell .....	Virgil R. Butt.....	Bakersville.
Montgomery .....	C. Daligny.....	Troy.
Moore .....	G. McLeod .....	Carthage.
Nash .....	J. P. Battle.....	Nashville.
New Hanover .....	W. D. McMillan.....	Wilmington.
Northampton .....	H. W. Lewis.....	Jackson.
Onslow .....	Cyrus Thompson .....	Jacksonville.
Orange .....	C. D. Jones.....	Hillsboro.
Pamlico .....	Geo. S. Attmore.....	Stonewall.
Pasquotank .....	Zenas Fearing .....	Elizabeth City.
Pender .....	R. H. Bradford.....	Burgaw.
Perquimans .....	T. S. McMullan.....	Hertford.
Person .....	W. A. Bradsher.....	Roxboro.
Pitt .....	L. C. Skinner.....	Greenville.
Polk .....	Dr. Grady .....	Tryon.
Randolph .....	L. M. Fox.....	Asheboro.
Richmond .....	A. C. Everett.....	Rockingham.
Robeson .....	B. W. Page.....	Lumberton.
Rockingham .....	Samuel Ellington .....	Wentworth.
Rowan .....	E. W. Currie.....	Salisbury.
Rutherford .....	A. A. Rucker.....	Rutherfordton.
Sampson .....	G. M. Cooper.....	Clinton.
Scotland .....	Peter McLean .....	Laurinburg.
Stanly .....	J. N. Anderson.....	Albemarle.
Stokes .....	J. Walter Neal.....	Walnut Cove.

## COUNTY PHYSICIANS

Surry .....	John R. Woltz.....	Dobson.
Transylvania .....	C. W. Hunt.....	Brevard.
Union .....	S. A. Stevens.....	Monroe.
Vance .....	E. F. Fenner.....	Henderson.
Wake .....	J. J. L. McCullers.....	Raleigh.
Warren .....	M. P. Perry.....	Macon.
Washington .....	W. H. Ward.....	Plymouth.
Watauga .....	J. W. Jones.....	Boone.
Wayne .....	T. M. Bizzell.....	Goldsboro.
Wilkes .....	J. M. Turner.....	N. Wilkesboro.
Wilson .....	W. S. Anderson.....	Wilson.
Yadkin .....	S. L. Russell.....	Yadkinville.
Yancey .....	T. B. Gibbs.....	Burnsville.

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\*From North Carolina Year Book, 1914.

## **Letter of Transmittal**

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RALEIGH, N. C., January 1, 1915.

*His Excellency, LOCKE CRAIG,  
Governor of North Carolina.*

MY DEAR SIR:—Under authority of section 3, chapter 62, Public Laws of North Carolina, as amended by the General Assembly of 1913, I have the honor to submit the Biennial Report of the State Board of Health for the years 1913 and 1914.

Very respectfully yours,  
*W. S. RANKIN,  
Secretary and Treasurer.*



## **Progress of Health Work in North Carolina for the Biennial Period 1913-1914**

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### **Legislation**

The General Assembly of 1913 enacted, with the single exception of the Act organizing the State Board of Health, the most important legislation ever enacted by a North Carolina General Assembly. This piece of legislation was known as the Vital Statistics Bill and it contained all the important provisions of the "Model Bill" drawn up by representatives of the Bureau of the Census of the United States Government, the American Medical Association, the American Bar Association and the American Public Health Association. The bill requires and provides for the registration of all deaths and births in this State and also for the more important data relating to the death of the decedent such as age, social condition, cause of death, etc. The enactment of this piece of legislation has committed irrevocably the State of North Carolina to efficient health work.

The principle of this last statement is easy to see when we recall that with the establishment of the correct death rate from all causes and a correct death rate from the different diseases, the people and the political parties have a right to demand as a result of an expenditure of public funds for health work a reduction in the death rates, both general and special. Should the Democratic party, which has been for some time and still is responsible for the administration of the State Government, and should the Republican party, which is responsible in certain counties for county government, fail to decrease their death rates, in one case the State death rate and in the other case the county death rate, the opponents of the party in power and the people as a whole are justified in condemning such government as inefficient in its most important branch or department, to wit, the department that deals with life itself.

It is, therefore, apparent that regardless of who shall be in power hereafter, the people, through their known death rate, are going to be able to fix responsibility and going to be able to demand results in health work. And this is a good thing, for it is better that politicians and administrations, Democratic and Republican, should die and change than that thousands of men and women and children should die needlessly.

The time is not far distant in North Carolina when the death rate of a State will be a political issue; either the Democratic party that is responsible for the death rate will point with pride to the decrease in the death rate under its administration, or the Republican party will effectively charge the Democratic party with inefficiency in government for a nonreduction in death rates. The fundamental value, then, of the Vital Statistics Law is in fixing responsibility and in measuring the degree of discharge of responsibility, and measuring even to the decimal point the efficiency of government in a certain department.

Too great credit cannot be given the General Assembly of 1913 and especially Hon. R. R. Williams in the House and Hon. F. P. Hobgood in the Senate, the respective fathers of the Vital Statistics Bill, for this fundamental piece of health legislation.

Another important piece of legislation enacted by the General Assembly was the General Amendments Bill, which amended several sections of the old health law and increased the appropriation to the State Board of Health \$10,000 annually. The new work made possible through the increase in the appropriation is by far the most important feature of this last piece of legislation.

Another change in the General Amendments bill, which is important enough to deserve mention in this connection, has to do with the title of the county health official: Where counties employ physicians to give a pinch of their time to treating diseases, such a physician will be known officially as the county physician. On the other hand, where the county employs a man to give three hundred and sixty-five days a year of his time to the health work of the county, such an employee will be known as the county health officer. This official distinction between county physician and county health officer, replacing the old term "county superintendent of health," that applied to both the man employed for part of his time and the man employed for his full time, is important. If a county employs a man for part of his time to treat its sick convicts and prisoners in the convict camp and jail, and its dependents in the county home, and to make one or two post-mortem examinations a year for the coroner, and one or two commitments to the insane asylums of the State, such an employee has no more right to the title of health officer than has the sheriff or jailer of the county. His work is that of a physician treating the least important part of the population. Hereafter, by statute, he will be known as the county physician, and the people of such a county will not be misled by the term "county superintendent of health" into believing that their county is doing health work. Where, on the other hand, the county employs a man to give his entire time to the health interests of the county, ninety-five per cent of his duties will have to do with the prevention of diseases. His work as a physician, that is in treating and attempting to cure disease, will be of little consequence as compared with his work as a health officer in the prevention of disease. Hence such an official will be known hereafter as the county health officer.

#### The Organization of the State Board of Health

The State Board of Health, in accordance with the spirit of conservatism for which our State has a just if not an enviable reputation, has evidenced itself in the slow development of the health activities of the State. It was in 1877 that the State of North Carolina took her first step in health work. In that year she created the State Board of Health. Two years later, in 1879, she gave the starving infant an annual appropriation of \$100. In 1881 the appropriation was raised to \$200 annually. Twelve years later, in 1893, the \$200 was raised to \$2,000; in 1899 to \$4,000; in 1909 to \$10,500; in 1911 to \$22,500; and in 1913 to \$40,500.

With the adjournment of the General Assembly of 1913, and more especially with the increase in appropriation, the Board of Health found itself developed to that stage where a certain amount of differentiation or specialization in health work seemed advisable. During the year 1913, then, the Board was reorganized after the plan shown in the illustration. One of the laws of life and of growth is that which keeps the proportion between mass and surface constant through a differentiation and division of labor. An institution or department that grows in accordance with the wisdom of this natural and, therefore, divine, law will differentiate its work into departments or bureaux as the demand and capacity for the work increases.

In the illustration on page 103 the board is seen to be a body in touch on the one hand with the Governor through five lines that signify his five appointees on the Board; and in touch on the other hand with the State Medical Society through four lines that signify the four members of the Board elected by the State Medical Society. Your Board of Health, therefore, represents jointly the State Government and the State profession, and stands as an official recognition of the natural partnership between society and the medical profession in the conservation of human life.

Under the Board is an executive office through which the Board is in touch with all divisions of its work. Note that each department or bureau is independent of all other bureaus. In placing all the bureaus on the same plane, the stimulus of individuality and the advantages of specialization are preserved to each bureau, while the symmetry of the Board's activities is maintained through the connection of all the bureaus or departments with the executive office.

I shall now touch briefly upon the work of each bureau or department during the past year.\*

#### The State Laboratory of Hygiene

The two charts show the work and the growth of the Laboratory of Hygiene during the past five years. In preparing these charts a classification of the work into the regular work of the Laboratory and into the irregular and new work of the Laboratory was deemed advisable for the sake of clearness.

The first chart shows the different kinds of work that the Laboratory has pursued uninterruptedly for the last five years. Please note especially the following interesting facts:

\*This is copied from report made in June, 1914.

## REGULAR WORK OF THE STATE LABORATORY OF HYGIENE FOR LAST FIVE YEARS.\*

Years	Appropriation	Water	Sputa	Widals	Diphtheria	Rabies	Pasteure	Malaria	Urine	Gono-cocci	Patho-logical	Miscel-laneous	Totals	Growth
1909-'10 . . . . .	\$ 6,000	1,680	516	264	377	148	158	69	92	34	88	25	3,451	66 %
1910-'11 . . . . .	6,000	1,920	771	460	364	159	165	119	58	52	39	20	4,127	16.37%
1911-'12 . . . . .	8,500	2,449	924	732	547	199	196	132	92	48	38	41	5,397	23.57%
1912-'13 . . . . .	8,500	2,183	1,091	790	660	298	259	196	83	78	39	28	5,705	5.47%
1913-'14 . . . . .	13,000	2,988	1,473	1,094	593	371	231	292	133	92	28	24	7,319	22 %
Totals . . . . .	\$ 42,000	11,220	4,775	3,340	2,541	1,175	1,008	808	458	304	232	138	25,999	133.27%
Averages. . . . .	\$ 8,400	2,244	955	668	508.2	235	201.6	161.6	91.6	60.8	46.4	27.6	5,199.8	26.64%

\*This is copied from report made in June, 1914.

(a) A continuous growth during the last five years in sputa, Widal, rabies and malarial examinations.

(b) A marked growth during the last five years, with slight annual fluctuations, in water, diphtheria, urine, gonococci, miscellaneous and pathological examinations.

(c) That the last year's work was the largest year's work in the history of the Laboratory.

(d) That there has been an average annual gain or growth in the Laboratory work for the last five years of 26.6 per cent.

(e) That during the last five years the Laboratory work has more than doubled.

**IRREGULAR AND NEW WORK OF THE STATE LABORATORY OF HYGIENE FOR LAST FIVE YEARS.**

Years	Stool Examinations	Distribution of Antitoxin	Distribution of Typhoid Vaccine
1909-'10 .....	678	..... units	immunizations
1910-'11 .....	22,565	..... units	..... estimated
1911-'12 .....	9,581	10,627,000 units	..... estimated
1912-'13 .....	7,285	12,965,000 units	..... estimated
1913-'14 .....	1,821	9,254,000 units	10,000 estimated

The second chart shows the irregular and new work of the laboratory during the last five years. The falling off in stool examinations in 1910 and 1911 was due to the Rockefeller Sanitary Commission having the stool examinations made in the field by the field directors instead of in the Laboratory. This chart also shows the amount of antitoxin distributed by the Laboratory during the last three years. The amount of antitoxin distributed by the Laboratory does not by any means represent the value of this feature of its work. As soon as the State began to supply an antitoxin, guaranteed by the United States Government as reliable, at practically one-fourth the original retail price, the various manufacturers of antitoxin immediately cut the retail price of their antitoxin to meet the State's competition, and it is, therefore, no longer necessary for a citizen to buy State antitoxin to get a reliable and reasonably cheap antitoxin.

Within the last year the Laboratory has begun a new work—the preparation and distribution of free typhoid vaccine. This new work is capable of having a greater influence on the State's death rates than any other phase of the Laboratory work, with the possible exception of water analysis. The amount of vaccine distributed during the last seven months was sufficient to immunize about ten thousand persons against typhoid fever.

The Laboratory, as you all know, is under the direction of Dr. C. A. Shore.

### The Bureau of Hookworm Eradication

Nearly a year ago,\* Dr. John A. Ferrell, one of the ablest health officers in this country, was called from the Bureau of Hookworm Disease, which he had founded, to very responsible duties in the central offices of the Rockefeller Sanitary Commission in Washington. Dr. C. L. Pridgen succeeded Dr. Ferrell as State Director of the work for the eradication of hookworm disease. Dr. Pridgen resigned in May of this year to take up private practice, and Dr. W. P. Jacocks, utility man of the Commission, is temporarily filling the vacancy created by Dr. Pridgen's resignation. The work of the Rockefeller Commission, as shown by the official reports of the Commission, is indicated on the chart.

HOOKWORM WORK.

	1910	1911	1912	1913
Examined.....	7,949	37,328	135,867	104,607
Treated.....	8,000	48,881	57,991	54,059

A hookworm campaign has been carried on in ninety-eight counties of the State, is being carried on in the ninety-ninth, and has been provided for in Ashe, the last county to vote funds for this work. Within a few weeks, the entire State will have been covered.

Second campaigns have been held in seven counties, and the results of the second campaigns have fallen short of expectations. A comparison of the results of the first and second campaigns in these seven counties shows that during the first campaign, as compared with the second campaign, the number of people examined in the average county was 3,666 as against 801, and the number treated 1,338 as against 249. The cost of treatment per case during the second campaign was something over \$2. The Commission is somewhat at a loss to understand the falling off of the work in the second campaign as compared with the first. The following explanations have been suggested:

- (a) Indifference, due to loss of novelty.
- (b) Unpleasant effect of salts and thymol.
- (c) Persistent skepticism.

The disappointing results of the second campaign, coupled with the high cost per case treatment, made it seem advisable to look for a new method of attack. The new method adopted consists in selecting a community of from twenty to thirty square miles, with a population of from twelve to fifteen hundred people, and attempting the complete eradication of hookworm disease from such community through the administration of thymol to all infected people and the construction of 75 per cent grade privies at all homes.

\*This is copied from report made in June 1914.

**Bureau of Engineering and Education**

This is the educational agency of the Board, and the bureau to which all engineering problems are referred. This Bureau is under the direction of Mr. Warren H. Booker, C.E.

The place of educational work in the field of public health is fundamental and is universally admitted to be so. To decrease the death rate means to change the customs of people and thereby improve sanitary conditions and to change the habits of people and thereby improve hygienic conditions. Customs and habits are not changed by law, but by persuasion and education. When customs and habits have changed to a degree that a majority of people understand the social effect of bad customs and bad habits, then the educational propaganda directed towards the improvement of such customs and habits become crystallized in the form of law. The activities of the Bureau during the last year\* have been as follows:

- (a) Preparation, publication and distribution of a forty thousand monthly edition of the *Bulletin* to the leading citizens of the State.
- (b) On special request of interested citizens and officials, the distribution of about one million pieces—pamphlets or leaflets—of health literature.
- (c) Of mailing letters from the Governor of the State and also from the Board of Health, together with a pamphlet on the care of babies, to each mother whose baby's birth is registered in the Bureau of Vital Statistics.
- (d) Supplying the newspapers of the State with regular, nontechnical, popular weekly newspaper articles on health subjects.
- (e) Giving a health exhibit in connection with a baby contest at the State Fair, which, according to newspaper reports, was one of the principal features of the Fair and of considerable educational value.
- (f) Giving advice or supplying assistance to thirty-three cities and towns for installing or altering their public water supplies or sewage disposal plants, and in advising a number of individuals about sewerage for their homes.
- (g) Passing upon the quarterly reports of the sanitary conditions of the watersheds of all the surface water supplies of the State, in connection with the Laboratory's findings showing the chemical and bacteriological conditions of the water, and in calling the attention of the proper State and local authorities to any danger indicated through such reports and findings.

**Bureau of County Health Work**

Twelve counties in North Carolina, to wit: Buncombe, Columbus, Durham, Forsyth, Guilford, Johnston, Nash, New Hanover, Robeson, Rockingham, Sampson and Vance have employed whole-time county health officers. While there are several States employing more whole-time health officers than North Carolina, our State leads the States of the Union in having the largest number of whole-time county health officers.

\*This is copied from report made in June, 1914.

The county health problem offers at once greater difficulties and greater possibilities than any other health problem. The difficulties are worthy of the patience of Wood, the diplomacy of Lewis, and the persistence of Ferrell. Unlike any other State health policy, unlike the laboratory policy, the hookworm policy, the educational policy, the engineering policy, the vital statistics policy and the tuberculosis policy, all of which are under the sole jurisdiction of the State, the county health policy is under the double government of the State and county, a divided jurisdiction. Along the hazy boundary between State and county jurisdiction lies the danger zone to the full development of county health work. If the State does not go as far as it can in helping the county, the best possible results are not obtained; if the State goes too far, the county resents it. The most fundamental principle of our government, that of local self-government, is involved in handling the county health problem.

In accordance with the fundamental purposes of the Board of Health, a Bureau of County Health Work has been established. The work of the Bureau is:

- (a) To assist interested individuals and organizations in county campaigns for whole-time health officers.
- (b) To prepare and furnish health literature, placards, pamphlets and multigraphed letters to county health officers.
- (c) To attempt to correlate, systematize and standardize the work of county health officers.

The Bureau of County Health Work had to be dropped in July of 1914 on account of lack of funds. It is most important that a thoroughly equipped bureau to develop and direct and assist in county health work should be organized at the earliest possible date.

#### Bureau of Vital Statistics

We have already touched upon the fundamental importance of accurate vital statistics and also pointed out the strong features of the North Carolina Vital Statistics Law. This law went into effect in North Carolina July 1, 1913. The first five or six months—that is, from July 1st to December or January 1st—was spent in getting out the necessary blank forms and literature and in securing the appointment of 1,400 local registrars by boards of county commissioners and in obtaining an accurate index of the doctors, undertakers, midwives, local registrars and others concerned in the proper enforcement of the law.

When one considers that State registration depends upon the intelligent, prompt, and cordial coöperation of 1,400 local registrars, 1,700 doctors, 1,300 midwives, and 700 undertakers; and consists in securing a total of 11,000 birth and death certificates each month, or 130,000 birth and death certificates each year, he can readily understand that satisfactory registration cannot be obtained in a day, a month, or several months. Mississippi, with one of the best registrars in the United States, has been under the model law for two years, and is now only recording about one-half of her actual death rate, that is, about ten deaths per 1,000 of her population. Virginia, under registration for the past eighteen months, is recording a death rate of only thirteen

and a fraction per thousand, far from complete, as compared with the average death rate for the United States and southern cities.

This Bureau is under the efficient direction of Dr. J. R. Gordon, who has so faithfully and ably served his State in the General Assemblies during the last ten or twelve years. The complete work of the Bureau of Vital Statistics is to be found on page 271 and following, this report.

Let me call attention to the fact that the State Board of Health by careful investigations in the counties and examination of records has found the mortality registration to be accurate in the following counties, which comprise 1,150,000 of the State's population:

Alamance .....	12.6	Iredell .....	12.9
Buncombe .....	15.3	Martin .....	11.4
Chowan .....	14.1	Mecklenburg .....	16.3
Clay .....	14.3	New Hanover .....	23.5
Dare .....	11.6	Pasquotank .....	16.8
Craven .....	17.0	Perquimans .....	13.1
Cumberland .....	16.0	Person .....	12.4
Davidson .....	10.8	Rowan .....	14.5
Durham .....	15.5	Scotland .....	13.1
Edgecombe .....	19.3	Transylvania .....	12.0
Forsyth .....	17.9	Union .....	8.9
Gaston .....	13.5	Vance .....	16.0
Granville .....	9.1	Wake .....	17.2
Guilford .....	15.1	Warren .....	15.8
Halifax .....	16.2	Wayne .....	16.1
Henderson .....	13.2	Wilson .....	15.5

The average death rate in these counties is 14.5 per thousand. This area which we have been able to check will hereafter be used as the determined death rate from which to measure progress in health work during the next year or two. Other counties will be annexed to this area just as soon as the State Board of Health investigate and find their records correct.

#### Bureau of Tuberculosis and Sanatorium

This Bureau was established on the principle that tuberculosis is a State problem and not a municipal or county problem. In support of this fundamental principle in the administration of health work I desire to quote from a recent address before the Southern Medical Association in Richmond, Va.:

"In the day of its last judgment, a State board of health must stand or fall by what it has done for the State's death rate. This fundamental responsibility belongs to the State board of health and cannot be shared with the subsidiary boards of health of the counties and municipalities, for the general death rate of a State is beyond their sphere of influence. It is then the duty of the State board of health to circle this central point of its activity, to consider its general death rate from all sides preliminary to finding its direct course through the adoption of definite State health policies. Such an examination of the general death rate

would show it to be divided into two main parts—the nonpreventable and preventable death rate; the latter rate, the preventable death rate, to consist of factors of varying importance, some of such minor importance as to be negligible and some of such major importance as to deserve to be kept as a fixed and guiding point ever in the mind of the health officer. Of these major factors in the preventable death rate, tuberculosis stands preëminent. This one disease causes one-fourth of the entire preventable death rate. This one disease offers the State board of health one-fourth of its total opportunity. This one disease places upon the board of health one-fourth of its entire responsibility. No State board of health can leave or delegate so great a responsibility to the weaker and, in this particular matter, ineffectual and irresponsible subsidiary boards of health of the counties and towns. Tuberculosis is therefore clearly and distinctively a State health problem of such magnitude as to call for a definite and comprehensive State policy for its control.

#### THE STATE'S ABILITY TO BEAR THE BURDEN OF TUBERCULOSIS.

The burden of responsibility for controlling tuberculosis being recognized as belonging primarily to the State, the first question is, Can North Carolina bear this burden? This question resolves itself into a consideration first of the financial strength of our State, and second, of the weight of the burden. The World Almanac says that North Carolina in wealth is the twenty-first State in the Union. The annual income of North Carolina is approximately \$3,000,000. Out of this limited revenue the State must pay the multiple and necessary expenses of its government, which no one can truly appreciate without looking over the State Auditor's report. So much for the financial strength of the State.

The weight of the burden of tuberculosis becomes apparent when we understand that there are all the time 18,000 visibly active cases of tuberculosis in North Carolina; that there are from 2,000 to 4,000 of these consumptives who will die for lack of proper treatment if left dependent upon their own resources; that recent investigations show that the average cost a day a patient in the average sanatorium of the United States is \$1.66; that the 2,000 to 4,000 consumptives of our State treated in sanatoria would therefore cost the State each day from \$3,320 to \$6,640, or for the year \$1,211,800 to \$2,423,600. On the principle that wholesale prices are cheaper than retail prices, on the principle that the State in one large sanatorium could give this treatment at a much lower figure, we may, for the purpose of this paper, conclude that the above figures could be reduced to between \$750,000 and \$1,500,000 a year. Even then the problem of tuberculosis would cost the State, at the lowest estimate, one-fourth of its entire income. Evidently North Carolina cannot bear the burden of tuberculosis in this form.

Changing the form of the burden, we may think briefly of a combination of sanatorium and dispensary, such as the State of Pennsylvania maintains out of its annual income of \$28,000,000. Any clearly defined, comprehensive policy of this kind for the State to deal with tuberculosis

will likewise be found to impose a burden with which North Carolina cannot get started.

Once more, a purely educational propaganda against tuberculosis is too diffusive a remedy, not specific enough and far too weak in its effect to be depended upon solely for treating so grave a State problem as tuberculosis.

In conclusion, it appears that the burden of tuberculosis is too heavy in undivided form for the State to bear.

#### *Divide the Burden.*

A burden that cannot be carried undivided, in bulk, by a single agency, can be easily carried when divided among multiple agencies. While the State cannot carry her burden of tuberculosis, she can have it carried. The State can divide the burden into many parts; the State can carry the larger part, a part large enough to encourage by her example the coöperation and assistance of all the political, fraternal, religious, business, social and insurance organizations within her realm; she can correlate and direct the coöperative efforts of these multiple agencies and so bring to bear concerted attack all along the retreating line of the greatest enemy of our people.

In order that the burden be properly divided and apportioned, in order that we may understand just what it consists of, in order that we may effectually appeal with *definite facts and figures* to the various possibly coöperative agencies, a State law requiring the reporting of every case of tuberculosis to a central office on a suitable blank form is the first essential. These report forms would furnish such information as to enable the central office to say just how many cases of tuberculosis there were in each county, how many cases of tuberculosis were members of the Methodist church or of the Presbyterian church, how many cases of tuberculosis were members of Masonic lodges, etc., and of these tuberculous members how many were incipient, how many moderately advanced, how many advanced, how many self-supporting, how many carried insurance, in what companies and how much, and other pertinent facts.

Having properly grasped and apportioned the tuberculosis problem, the following plan of attack is proposed. This consists of two parts: A coöperative sanatorium and a correspondence school for tuberculosis.

#### THE CO-OPERATIVE SANATORIUM.

##### *Construction by the State.*

With the State's existing equipment, consisting of a farm of about 1,300 acres and a sanatorium of 90 available beds and 35 beds available after slight repairs to buildings, a construction budget of \$50,000 a year for the next six years would provide a sanatorium with a capacity of 500 beds which would care each year for 1,000 of the State's incipient and moderately advanced consumptives, or about one-seventh of the white consumptives of the State. This seems reasonably within the State's means. Such a building appropriation would provide a sana-

torium of about 250 beds capacity by 1917, an enlargement to 350 beds by 1919, and a full grown 500-bed sanatorium by 1921, six years hence.

*Maintenance by the State and Coöperative Agencies.*

The total amount of funds for maintenance to be derived from the State, patients, and all local governmental, religious, fraternal and social organizations which might be interested in the care of their members would be, for an institution of 100 beds \$60,000 annually, or \$1.64 per capita per diem; for an institution of 250 beds, \$130,000 annually, or \$1.42 per capita per diem; and for an institution of 500 beds, \$225,000 annually, or \$1.23 per capita per diem. This maintenance expense would probably be borne somewhat as follows:

1. By the State, from \$40,000 to \$50,000 annually for the first two years—that is, 1915 and 1916—and for the next four years \$50,000 annually. Certainly the State can afford this part of the maintenance budget. It will be seen then that the total State appropriation, construction and maintenance called for in this budget amounts to about \$100,000 a year for six years.

2. The sanatorium will receive \$1 a day for each patient from either the patient himself or from some organization, political (county or town) or religious, fraternal, business or social, to which the patient belongs, or from the patient and organization jointly. Those patients who can afford the \$1 a day will pay it themselves and will then be securing sanatorium treatment for one-third of what it would cost them in the average sanatorium. It will be the business of the Bureau for Tuberculosis and the Correspondence School, hereinafter described, to find and interest various organizations that may be appealed to in behalf of particular patients. The total amount of funds from patients and other organized interests would be as follows: For 100 patients, \$36,500 a year; for 200 patients, \$73,000 a year, and for 500 patients \$182,500 a year. The organizations that may be appealed to to assist patients are as follows:

(a) The political units of the State, the counties and towns, can well afford to endow from one to ten beds at from \$365 to \$3,650 a year, where from two to twenty of their needy and deserving consumptive citizens can be sent by the county or municipal authorities for proper treatment.

(b) The fraternal orders, two of which, the Masonic Order and the Odd Fellows, are already contributing to the sanatorium, can be interested in making appropriations or endowing beds for the care of their consumptive members.

(c) The various religious denominations and certain strong individual churches can be effectively appealed to for partial or full support of their consumptive members.

(d) Large corporations, especially cotton mill corporations, can be appealed to effectively for endowing beds for deserving operatives.

(e) Various social organizations, particularly women's clubs, can be interested in securing contributions to pay the expenses of needy and deserving consumptive citizens of their community.

(f) Insurance companies can be interested in providing treatment for policyholders.

*Two Principles in the Plan of Coöperation.*

The *first* principle is that through the law requiring that all cases of tuberculosis in the State shall be reported by the householder and physician to the central bureau, it will be possible in appealing to any county, to any town, to any fraternal order, to any church or denomination, or to any corporation, to state exactly the number of consumptives and the condition of the consumptives, financial and physical, sex, age, etc., within the organization appealed to. To make this point clear, let me illustrate: If the Sanatorium desired to go before the Grand Lodge of Masons with a view of interesting the Grand Lodge in the care of its consumptive brethren in the State Sanatorium, it could furnish the Grand Lodge the names and addresses of the consumptive Masons of the State, the number of these Masons in the incipient stage of the disease and the number dependent upon outside help for proper treatment. The appeal could be made on exact facts.

The second principle is that all of the coöperative agencies, including the State, will be asked in making their contributions to the maintenance fund to make their appropriation of such amount and with such conditions attached as to encourage further contributions from other sources. For example, the State, in furnishing a sanatorium and contributing a certain amount for its maintenance, brings its advantages *not to*, but easily within the financial grasp of the Grand Lodge; the Grand Lodge in making its contribution for taking care of consumptive Masons makes it a condition that the local lodge of which the consumptive applicant for sanatorium treatment is a member shall put up a certain amount, and perhaps the local lodge agrees to put up a certain amount if the patient himself will put up a certain amount. In short, the principle is to distribute the burden.

The construction and maintenance of the coöperative sanatorium, as above outlined, reaches, even when completely developed, only about 1,000 of the 18,000 consumptives in the State, and, as one can readily see, falls very far short of reaching the heart of the problem. However, the coöperative sanatorium is the lesser of the two agencies suggested for dealing with the problem of tuberculosis in this State. The major agency is—

**THE CORRESPONDENCE SCHOOL.**

The correspondence school will be run in connection with the sanatorium and will require from \$8,000 to \$10,000 a year out of the maintenance funds for its support. The correspondence school will do three things:

1. It will receive the reports of cases of tuberculosis in the State under the law requiring that such reports be made; that is to say, the correspondence school will get into touch with from 10,000 to 15,000 of the 18,000 consumptives of our State.
2. The correspondence school will bring the needy incipient and moderately advanced consumptive and the organization of one kind or another that has an interest in him together.
3. The correspondence school will matriculate all cases of tuberculosis not in the Sanatorium as members of the school, and will develop an educational course through intelligently sympathetic, unofficious letters

with all evidence of circular form and multigraph disguised in their strong personal flavor that will teach these 10,000 to 15,000 consumptives how to live and let live.

In order to arrive at some intelligent opinion as to what the effect of this specific and rather personal educational work will have on the consumptive death rate of the State, we may note that the general and rather sporadic educational efforts to reduce the death rate of tuberculosis heretofore pursued in other places has resulted in the following reduction of the consumptive death rate: A 49 per cent reduction during the last fifty years throughout the civilized world; a 63 per cent reduction during the last fifty years in the State of Massachusetts; an 18 per cent reduction in five New England States during the last thirteen years, and a 16 $\frac{2}{3}$  per cent reduction in New York State during the last ten years.

#### *Advantages of Combination of Sanatorium and School.*

1. The combination of the two gives the State an educational organization analogous to the ideal system of education in operation in the State of Wisconsin. The coöperative sanatorium in this system is the central university where about one-tenth of the consumptive population is treated, and is taught what constitutes the right kind of treatment for consumption. These alumni on returning home and seeing other cases not being properly treated, enable the sanatorium reflexively to improve the medical supervision of consumptives throughout the State. The correspondence school, an adjunct of the central university or sanatorium, puts the State government in almost personal touch with its entire tubercular population.

2. The combination of sanatorium and school is of mutual advantage, the one developing the other. The sanatorium provides out of its maintenance funds a small percentage that can hardly affect the per capita per diem cost, but which will easily make possible an effective correspondence school, while this school, in touch not only with the consumptives of the State, but with all the organized interests, political, fraternal, religious, business and social which may be interested in these consumptives, will abundantly nourish a strong sanatorium.

#### **Debits and Credits in Health Work**

The State of North Carolina appropriates \$40,500 for public health work. In addition to this, exclusive of it, the State permits the Board to have free printing up to an amount of \$4,000 and each public water company of the State pays into the State Laboratory of Hygiene for the monthly analyses of its water \$64 per year, amounting all told to about \$6,000. So much for revenue.

#### **HOW THIS MONEY IS USED.**

Item No. 1.—The State Laboratory of Hygiene examines annually 4,000 microscopic specimens, which would cost the people and the physicians of this State, if examined in other laboratories, \$6,000. This \$6,000 is the first dividend that is paid on the State's investment of \$44,500 in the State's health.

Item No. 2.—The State Laboratory of Hygiene examined last year\* 3,000 samples of drinking water. These analyses made by other State laboratories, or by private laboratories, would have cost our State \$15,000. This is the second dividend paid on the State's investment of \$44,500 in the State's health.

Item No. 3.—The State Laboratory of Hygiene treated last year\* 371 citizens of North Carolina who had been bitten by rabid animals. The efficacy of the treatment of the State Laboratory may be judged from the fact that as a rule one person out of every 250 applying for Pasteur treatment dies from rabies. The State Laboratory has now treated \*1,200 patients bitten by rabid animals without a single death. It would have cost the 371 citizens of the State \$24,000 to have been given the Pasteur treatment outside of the State. This \$24,000 is then the third dividend paid on the State's investment of \$44,500 in the State's health.

Item No. 4.—The General Assembly of 1911 gave the State Board of Health the authority to contract with manufacturers of diphtheria antitoxin, that hold a United States license, for a State supply of antitoxin to be purchased from the lowest bidder by the State Laboratory of Hygiene and distributed through antitoxin stations in the various counties to the people at exactly the cost of the antitoxin to the State. We might say right here that the quality of the antitoxin is guaranteed by the United States government. Antitoxin is sold in packages, which are graded according to the units of potency per package, in packages of 1,000, 3,000, and 5,000 units. The prices of these packages of antitoxin, before this arrangement was made, were as follows:

1,000 units .....	\$2.00
3,000 units .....	5.00
5,000 units .....	7.50

Under the present arrangement the same antitoxin can be purchased in North Carolina at the following prices:

1,000 units .....	\$0.50
3,000 units .....	1.35
5,000 units .....	1.95

Estimating the amount of saving on this vital necessity from the amount of antitoxin distributed per 100,000 population by States keeping such records, and on the difference in cost of antitoxin, this law is saving the State annually at least \$30,000. This is the fourth dividend paid on the State's investment of \$44,500 in the State's health.

Item No. 5.—Before the State Laboratory began to supply typhoid vaccine free to the people, every immunization cost \$1.50, and consequently relatively few people were immunized. With free vaccine there will probably be at least 50,000 to 60,000 vaccinations this year,\* on which will be saved \$1.50 each, or a total of not less than \$75,000, which is the fifth dividend on the State's investment of \$44,500 in the State's health.

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\*This is copied from Democratic Hand-Book of 1914.

Item No. 6.—In 1911 the State Board of Health was instrumental in securing from the General Assembly a law making the quarantine of smallpox optional with the counties, and giving the right to the State Board of Health of advising that no quarantine be established, except under exceptional circumstances. An inquiry sent to county physicians the year before this law was passed showed that there were annually 7,500 cases of smallpox in North Carolina, with a cost for quarantine of \$66,000 a year. An inquiry sent out to county physicians one year after this law went into effect showed a decline in the number of cases of smallpox from 7,500 to 3,300 and a decline in the public cost of the disease from \$66,000 to \$2,600. It is reasonable to conclude that through the enactment of this law the State Board of Health is saving the State every year something like \$50,000, and at the same time more effectually controlling the disease. This \$50,000 may therefore be considered as the sixth dividend paid on the State's investment of \$44,500 in the State's health.

*The dividend paid on the six items above enumerated makes a total of \$200,000 on the investment of \$44,500 per annum.*

There are other items saved which space will not permit us to mention. We shall content ourselves with mentioning only one more, to-wit, the saving to the municipalities of North Carolina through the law which requires that all towns and cities in this State, before installing waterworks or sewerage, shall submit their plans and specifications to the State Board of Health for approval. Through this law our municipalities are safeguarded against the work of cheap engineers and contractors, and against investing their money in waterworks and sewerage systems of little value. We know, for example, of one town that constructed a public water supply before this law was in operation, without first submitting their plans and specifications to the State Board of Health, and that found after its waterworks had been installed that they had lost something like \$15,000 in the venture.

*Such is the value of public health work from a purely business standpoint.*

#### The Real Value of the State Board of Health

is humanitarian; its chief end is not to save dollars, but lives. The true ledger of the State Board of Health is kept, not in dollars and cents, but in death rates. The real test and the value of the State Board of Health can be measured best by its effect on the State's death rate—either in the reduction of a high death rate or in the maintenance of an average or low death rate. If this State had had a registration law for the past five years, we could see probably a decline in the State's death rate, that is, in the number of deaths per thousand population from year to year, that would be the pride of North Carolina.

Fortunately the General Assembly of 1913, recognizing the need of a vital statistics law for the purpose of knowing how the general death rate of North Carolina compared with the death rate of other registration States, how the death rate of North Carolina changed from year to year as the result of public activities, how the death rate of various counties compared with each other, what the principal sources of mortality were, and for the many other usages of registration of births and

deaths, passed the vital statistics law. From now on, therefore, the State will be able to show, not only the dollars it has saved through public health as a business, but the number of lives saved as a humanitarian obligation.

The humanitarian purposes of the State Board of Health or the saving of human life are best subserved through the educational work of the Board. It undertakes the instruction of all the people through the press, sanitary addresses, and special literature in regard to the important causes of death and the means of avoiding them. During the past year\* the State Board of Health has issued 40,000 regular monthly bulletins, carrying life-saving information to 200,000 people, or about one white family out of seven. The Board, through the kind assistance and co-operation of the press of the State, through the weekly and daily papers, has reached a large part of the population with sanitary information.

Another important principle in the plan of State health work is the development of efficient county health administrations. The same argument that establishes the county unit of government as distinct from the State government will apply to the establishment of a county sanitary division of government as distinct from the State sanitary administration. The State Board of Health in the last two years\* has assisted in securing the adoption of the principle of whole-time county health officer, the first step in the direction of the county health government, by eleven North Carolina counties. The proper development of county systems of public health will serve to bring sanitary instruction and sanitary government closer to the people, and will result in the saving of thousands of lives that would be lost without active and effective county sanitary administration.

### The Present Needs of the State Board of Health

#### NEED NO. I: AN EFFICIENT BUREAU OF COUNTY HEALTH WORK.

There should be created and maintained under the Board of Health a bureau for county health work. Such a bureau would consist of a bureau chief and a stenographer. The bureau chief should be a physician who has had some practical experience in county health work. The work of this bureau would be:

(a) To interest counties in the equipment and maintenance of efficient county departments of health. There are many counties in North Carolina with very high death rates—that is, with death rates far in excess of the average death rate of the United States of fourteen deaths a thousand a year—that are amply able to spend some of their resources in the reduction of their death rates. Manifestly, if it is the duty and responsibility of the State Board of Health to reduce the State's death rate, such a reduction will be brought about more surely, readily, and decidedly by securing the active coöperation of the counties. Many counties could be interested in their health problem if there were some agency that gave its entire time to the study of the county health problems of the different counties for the purpose of presenting such problems in definite form with reasonable recommendations to the county authorities.

\*This is copied from Democratic Hand-Book of 1914.

(b) After securing the adoption of the necessary provisions for effective county health work, it would be the duty of the bureau of county health work to assist the county authorities and the newly elected health official to plan and inaugurate the county health work in the most effective manner.

(c) Lastly, it would be the duty of this central bureau of county health work to keep in close touch with the various methods pursued by those counties employing whole time county health officers for the purpose of keeping all counties informed in regard to efficient methods of health work undertaken and demonstrated by the different counties. In this way, each county would receive the benefit of the experience of all the counties, and this would result eventually in the correlation and systematization of county health work.

#### NEED NO. II: AN INSPECTION AND EPIDEMIOLOGICAL SERVICE.

An inspection and epidemiological service is badly needed in this State. It can be obtained cheaply by utilizing the new graduates of our best medical schools. These men could be given practical training under the older and experienced men on the staff of the Board. The probable work of this service would be as follows:

(a) The probable inspection and improvement of sanitary conditions in hotels, cafes and restaurants. This would depend upon the adoption of the hotel inspection bill by the General Assembly. This bill will be brought forward by the Travelers Protective Association of North Carolina. These inspections would be recorded in the form of score cards, hotel, cafe, or restaurant rated according to its score, and the rates of the hotels, restaurants and cafes inspected published in the Bulletin and the newspapers every month. The publicity given an unsanitary hotel would be sufficient to correct evil conditions. Moreover, it is but fair to those hotels that are doing right in the matter of sanitation that they should be given public credit for their efforts. The clean hotels, those meeting the proper sanitary requirements, are, without some sort of inspection and public acknowledgment, at a disadvantage with the hotel that disregards its obligations to the public by permitting unsanitary conditions.

Hotel inspection by State officers is entirely logical and in accord with the principles of good government. Hotels are not local institutions except in location and are not private institutions except in ownership. They are State institutions from every other consideration. Those who live in the hotels are not the people of the town in which the hotel is located, but people from other towns and counties and other States. An unsanitary hotel may easily serve as the distributing station of dangerous diseases over a large territory, while a sanitary hotel is a lesson in sanitation that its guests carry with them to their scattered homes.

(b) The inspection and epidemiological service would inspect all State institutions and State convict camps, as at present required of the State Board of Health, and in addition, would inspect the county convict camps and jails, which as a rule are not in as good sanitary condition as the State camps. Convict camps would, like the hotels, be inspected according to score card methods, and the scores of the various camps in-

spected during the month published in the Bulletin. This kind of publicity will be all that is needed to stimulate badly needed sanitary reform in the management of prisoners.

(c) The same inspection service that would inspect the hotels, restaurants, cafes, convict camps and jails in a county would also enforce the vital statistics law in the county and in that way materially aid in, the accurate registration of births and deaths in North Carolina, upon which the whole fabric of intelligent health work is based.

(d) This inspection force would be trained in the proper management of outbreaks of the various contagious and epidemic diseases, and would be assigned to assist the counties and towns of the State upon the requests of the towns and counties.

(e) This inspection force might also, if it is found that time will permit, open and maintain vaccine stations for the free vaccination of the citizens of different counties against typhoid fever. In doing this it might be possible to obtain some remuneration for this service from the counties in which the vaccine stations were held and in this way assist in paying for the inspection and epidemiological service.

(f) Probably the most important piece of work that this inspection service would render would be in assisting the bureau of county health work in organizing or inaugurating systems of county health work in the counties desiring the assistance of the Board. For example, a county decides to employ a whole time county health officer and requests the State Board of Health to send an agent or one of its officers to set up the machinery of county health government, to develop an efficient plan or system of county health work, to begin the work and run it for six weeks or two months, until everything is moving smoothly and satisfactorily, at which time the county official employed by the county authorities assumes control.

(g) The inspection and epidemiological service can be of great assistance in the work of the Board by developing and carrying on a popular educational plan of work connected with their other work. For example, each one of the inspectors would be equipped with a lantern and a full set of slides and in going about over the State could give many popular illustrated health lectures as prearranged and provided by the central office.

In addition to the above opportunities, other opportunities for valuable service would develop as the inspection and epidemiological service of the Board carried on their work.

#### NEED NO. III: ASSISTANCE FOR VITAL STATISTICS BUREAU.

The original Vital Statistics bill which the General Assembly of 1913, to its great credit, passed, called for an appropriation of \$12,000 annually. That appropriation would have been sufficient to secure complete records of births and deaths from all the counties of the State. The General Assembly, however, saw fit to cut the appropriation from \$12,000 to \$10,000, which has so seriously handicapped the bureau that for a considerable section of the State the birth rates and death rates cannot be accepted as accurate. The bureau has done a tremendous amount of work, which is very well shown in its report on pages —— It should be understood that a Vital Statistics bill is most difficult and

most expensive to operate during the first three or four years; that after the people become accustomed to its operations and understand its requirements, the cost of securing the certificate is lowered. The Vital Statistics Bureau is badly in need of an additional \$2,000 appropriation—that is, an appropriation as originally called for. Unless this appropriation is forthcoming it will be impossible to secure accurate registration from the whole State. A half or three-quarters of the population will be all that the Vital Statistics Law can include in its operations.

#### NEED NO. IV: ASSISTANCE TO STATE LABORATORY.

The State Laboratory of Hygiene during the last five years has been meeting a constantly increasing public demand for laboratory work. The average annual increase in the demand and work of the laboratory for the last five years has been 26.6 per cent. To meet this increased demand, to keep the laboratory adequate to supply the needs of the people, an additional appropriation of not less than \$2,500 will be necessary.

#### NEED NO. V: ASSISTANCE TO BUREAU OF EDUCATION.

The most fundamental piece of work, with the exception of securing an accurate registration of births and deaths, which the State Board of Health of North Carolina is performing, is its educational work. The work is carried on through the Bulletin, properly edited newspaper material, exhibits, and stock lectures. This bureau cannot begin to meet the demands that are made upon it. There are many opportunities for educational work that would surely tell in a reduction in the State's death rate if this bureau were financially able to grasp such opportunities. The bureau should be given increased funds adequate to the opportunities open to it.

#### Costs

##### HEALTH BUDGET DURING LAST BIENNIAL PERIOD.

Total annual State Health appropriations.....	\$40,000.00
Total annual Rockefeller Commission appropriation.....	15,675.97
<hr/>	
Combined or total annual health budget.....	\$55,675.97

##### NECESSARY ALTERATIONS IN HEALTH BUDGET DURING NEXT BIENNIAL PERIOD.

On March 31st, 1915, the Rockefeller Sanitary Commission go out of existence and their annual appropriation of \$15,675.97, which has assisted in the health work in North Carolina, will be discontinued. The State Board of Health will have, unless the General Assembly makes up the deficit, only \$40,000 a year for health work during the next two years.

Of the \$40,000 appropriated by the State, \$8,000 is designated to be spent in connection with the hookworm campaign. It is desired that this \$8,000 shall be a part of the general health budget rather than a specific appropriation, so that the Board may use this fund for assisting the counties in developing their health work. The State Board of Health asks that the deficit of \$15,675.97 be partially replaced by an

additional appropriation from the General Assembly of \$10,000, which, added to the \$40,000 now appropriated, will make the State Health Budget exactly \$50,000 annually.

This amount is not a large health appropriation. It amounts to a per capita expenditure of practically 2 cents a year on the health of our people. The cities of the United States are now spending on the health of the urban people \$1.65 per capita per year. Surely 2 cents is not too much for rural North Carolina. United States government statistics show three cities with populations of less than 100,000 expending on health and sanitation the following sums:

<i>City.</i>	<i>Population.</i>	<i>Health and Sanitation Appropriation.</i>
Brookline, Mass. ....	27,792	\$ 76,100
Lawrence, Mass. ....	85,892	229,008
New Bedford, Mass. ....	96,652	228,357

United States government statistics also show the following cities with populations between 100,000 and 200,000 with health appropriations as follows:

<i>City.</i>	<i>Population.</i>	<i>Health and Sanitation Appropriation.</i>
Atlanta, Ga. ....	154,839	\$345,832
Cambridge, Mass. ....	104,839	252,257
Fall River, Mass. ....	119,295	163,319
Worcester, Mass. ....	145,986	261,411
Grand Rapids, Mich. ....	112,571	151,632
Syracuse, N. Y. ....	137,249	308,511
Richmond, Va. ....	127,628	286,147

The same statistics show that the smallest appropriation for health and sanitation of any city in the United States with a population between 100,000 and 200,000 is the appropriation of \$125,810 by Bridgeport, Conn., with a population of 102,054.

The additional \$10,000 will be needed for the following purposes:

For inspection service and epidemiological work.....	\$2,000
For the Bureau of Vital Statistics .....	2,000
For the Bureau of Education and Engineering.....	3,000
For the State Laboratory of Hygiene .....	3,000

In conclusion, let us remember that the death rate is of equal political significance, or is soon to be of equal political significance, with the tax rate; that in conflicting considerations where the two rates are involved human life should have precedence over dollars and cents.

"Ill fares the land, to hastening ills a prey,  
When wealth accumulates and men decay."

**PUBLIC HEALTH LAWS OF NORTH CAROLINA**

[Chapter 62, Public Laws of 1911, As Amended by Chapter 181,  
Public Laws of 1913.]

*The General Assembly of North Carolina do enact:*

**SECTION 1. *State Board of Health, how elected.***

Election and  
appointment of  
board.

The Medical Society of the State of North Carolina shall choose from its members by ballot four members and the Governor of the State shall appoint five other persons (one of whom shall be sanitary engineer), and they shall constitute the North Carolina Board of Health.

Terms of office.

The members of the board of health elected by the State Medical Society shall be chosen to serve for six years. Their term of office shall begin immediately upon the expiration of the meeting at which they were elected. Those appointed by the Governor shall serve for six years, their term of office beginning with the first regular meeting of the board after their appointment. In case of death or resignation, the board shall elect new members to

Vacancies.

Proviso:  
vacancies filled by  
governor.

fill the unexpired terms: *Provided*, the Governor shall fill such vacancies as may occur where he has made appointments.

**SEC. 2. *Term of office; vacancies, how filled.***

Cognizance of  
health interests.

The Board of Health shall take cognizance of the health interests of the people of the State; shall make sanitary investigations and inquiries in respect to the people, employing experts when necessary;

Investigations and  
inquiries.

shall investigate the causes of diseases dangerous to the public health, especially epidemics, the sources of mortality, the effect of locations, employments, and conditions upon the public health. They shall gather such information upon all these

Distribution of  
information.

matters for distribution among the people, with the especial purpose of informing them about preventable diseases. They shall be the medical advisers of the State, and are herein specially provided, and shall advise the Government in regard to the location, sanitary construction, and management of all State institutions,

Medical advisers.

and shall direct the attention of the State to such sanitary matters as in their judgment affect the industries, prosperity, health and lives of the people of the State. They shall make an inspection once in each year, and at such other times as they may be requested to do so by the State Board of Charities, of all public institutions, including all convict camps under the control of the State's Prison, and make a report as to their sanitary condition, with suggestions and recommendations, to their respective boards of directors or trustees; and it shall be the duty of the officials in immediate charge of said institutions to furnish all

Location, con-  
struction, and  
management of  
state institutions.

facilities necessary for a thorough inspection. The secretary of the board shall make biennially to the General Assembly, through the Governor, a report of their work.

Inspections.

Biennial reports.

**SEC. 4. *May make regulations in times of epidemics.***

In times of epidemics of smallpox, yellow fever, typhoid fever, scarlet fever, diphtheria, typhus fever, bubonic plague and cholera the State Board of Health shall have sanitary jurisdiction in all cities and towns not having regularly organized local boards of health, and are hereby empowered to make all such regulations as they may deem necessary to protect the public health, and to enforce them by suitable penalties.

**SEC. 5. *Bulletins of diseases issued; rules made to check disease; pay of members for.***

Bulletins of the outbreak of disease dangerous to the public health shall be issued by the State board, whenever necessary, and such advice freely disseminated to prevent and check the invasion of disease into any part of the State. It shall also be the duty of the board to inquire into any outbreak of disease, by personal visits or by any method the board shall direct. The compensation of members on such duty shall be four dollars a day and all necessary traveling and hotel expenses.

**SEC. 6. *Officers of; salary of secretary; pay of members.***

The State Board of Health shall have a president, a secretary, officers who shall also be treasurer, and an executive committee, said executive committee to have such powers and duties as may be assigned it by the board of health. The president shall be elected from the members of the board and shall serve six years; the secretary-treasurer shall be elected from the registered physicians of the State and shall serve six years. The executive committee shall be composed of the president of the board, *ex officio*, and two other members of the board to be elected from those composing it. The executive office of the board shall be in the city of Raleigh, and the secretary shall reside there. The secretary shall be the executive officer of the board and shall, under its direction, devote his entire time to public health work, and shall be known as the "State Health Officer." He shall receive for his services such yearly compensation as shall be fixed by the board, not to exceed three thousand dollars, and his actual traveling and hotel expenses when engaged in the work of the board. The board may in its discretion elect as a special assistant to the State Health Officer, for the antituberculosis work, the Secretary of the State Association for the Prevention of Tuberculosis, at an annual salary not to exceed six hundred dollars. The members of the board shall receive no pay, except that each member shall receive four dollars and necessary traveling and hotel expenses when on actual duty in attending the meetings of the board or of the executive committee or in pursuing special investigations in the State; but when attending important meetings beyond the limits of the State, the number of delegates thereto being limited to one, in addition to the secretary, only actual traveling and hotel expenses shall be allowed. These

Jurisdiction in  
times of epidemic.  
Inquiries into  
outbreaks.  
Compensation of  
members on duty.  
Executive office.  
Residence of  
secretary.  
Salary.  
Members of board.  
Delegates.

sums shall be paid by the treasurer on authenticated requisition, approved and signed by the president.

**SEC. 7. Time of meeting to elect officers.**

Time of meeting to elect officers.

The meetings of the State Board of Health for the election of officers shall be on the second day of the annual meeting of the Medical Society of the State of North Carolina in the year one thousand nine hundred and one and every six years thereafter.

**SEC. 8. Time of special and regular meetings.**

Special meetings.

Special meetings of the State Board of Health may be called by the president through the secretary. The regular annual meeting shall be held at the same time and place as the State Medical

Annual report.

Society, at which time the secretary shall submit his annual re-

Meetings of executive committee.

port. The executive committee shall meet at such times as the president of the board may deem necessary, and he shall call such meetings through the secretary.

**SEC. 9. County board of health, who constitutes; election of county physician or county health officer.**

Members of county board of health.

The chairman of the board of county commissioners, the mayor of the county town, and in county towns where there is no mayor the clerk of the Superior Court, and the county superintendent of schools shall meet together on the first Monday in April, one thousand nine hundred and eleven, and thereafter on the first Monday of January in the odd years of the calendar, and elect from the regularly registered physicians of the county, two physicians, who, with themselves, shall constitute the county board of health. The chairman of the board of county commissioners shall

Organization.

be the chairman of the county board of health, and the presence of three members at any regular or called meeting shall constitute a quorum. The term of office of members of the county board

Term of office.

of health shall terminate on the first Monday in January in the odd years of the calendar, and while on duty they shall receive four dollars *per diem*, to be paid by the county. The county board of health shall have the immediate care and responsibility

Pay.

of the health interests of their county. They shall meet annually in the county town, and three members of the board are authorized to call a meeting of the board whenever in their opinion the public health interest of the county requires it. They shall make

Health interests of county.

such rules and regulations, pay such fees and salary, and impose such penalties as in their judgment may be necessary to protect and advance the public health; *Provided*, that all expenditures shall be approved by the board of county commissioners before being paid. The board of health shall meet on the first Monday of July, one thousand nine hundred and thirteen, and thereafter on the second Monday of January in the odd years of the calendar, and elect either a county physician or a county health offi-

Annual meetings.

cer, who shall serve thereafter until the second Monday in Janu-

Called meetings.

ary of the odd years of the calendar: *Provided*, that if the county board of health of any county shall fail to elect a county physician or county health officer within two calendar months

Powers.

Proviso: expenditures approved by county commissioners.

Election of county physician or county health officer.

Term of office.

Proviso: appointment on failure of county board to elect.

of the time set in this section, the Secretary of the State Board of Health shall appoint a registered physician of good standing in the said county to the office of county physician, who shall serve the remainder of the two years, and shall fix his compensation to be paid by the said county, in proportion to the compensation paid by other counties for like service, having in view the amount of tax collected by said county.

*SEC. 10. Rules of county board of health.*

If any person shall violate the rules and regulations made by violation of rules .  
the county board of health he shall be guilty of a misdemeanor, and regulations a  
misdemeanor.  
and fined not exceeding fifty dollars or imprisoned not exceeding Punishment.  
thirty days.

*SEC. 11. Duties of county physicians and health officers; penalty for nonperformance.*

The duties of the county physician shall be to make the medico-legal *post mortem* examinations for the coroners' inquests, to make examination of lunatics for commitment, to render professional service to the sick inmates of the convict camp, jail, and county home, upon request of the superintendent or the keeper of these institutions, and to determine the nature of any particular disease, upon the request of the quarantine or deputy quarantine officer: *Provided*, that the county physician shall have the right to employ any other regularly registered physician of his county, to perform any or all of the duties pertaining to the jail, county home, or convict camp, when in his judgment it is desirable to do so: *Provided, however*, that the terms under which such physician is employed by the county physician shall be approved by the board of county commissioners. The duties of the county health officer shall be to devote his entire time to the county public health work, and he shall perform the duties of the county physician, the duties of quarantine officer, and the following additional duties: he shall make a sanitary examination during the summer months of every public school building and grounds in the county, and no school committee or teacher shall make use of any school building or grounds until the county superintendent of health shall certify in writing that said building and grounds have been inspected and found to be in a satisfactory sanitary condition within four months of the date of the certificate. He shall examine every school child that has previously been examined by the teacher according to methods furnished said teacher by the county superintendent of schools, and reported to said county superintendent of schools as probably defective in the condition of its eyes, ears, nose, or throat, and he shall further endeavor to have examined the feces of every child whom he suspects of having hookworm disease. He shall notify on blank forms and in accordance with instructions furnished by the State Department of Public Instruction, every parent or guardian of a child having any defect of the aforesaid organs, or hookworm disease, and he shall suggest to

Duties of county physicians.  
Proviso: power to employ and pay other physicians.  
Duties of county health officer.  
Examination of school buildings and grounds.  
Examination of children.  
Examinations for hookworms.  
Notification to parents.

**Co-operation with educational officers.** said parent or guardian the proper course of treatment and urge that such treatment be procured. He shall coöperate fully with the county board of education, the county superintendent of schools, and the teachers in the public schools, to the end that children may be better informed in regard to the importance of

**Educational work.** health and the method of preventing disease. He shall, through the county press, public addresses, and in every available way, endeavor to educate the people of his county to set a higher value on health, and to adopt such public and private measures as will

**Violation of section a misdemeanor.** tend to a greater conservation of life. Any violation of this section shall constitute a misdemeanor, and shall subject the defendant to a fine of not less than ten dollars nor more than fifty dollars.

**Punishment.**

**Notification to persons maintaining nuisance.**

**Abatement of nuisance.**

**Limit of expense.**

**Proviso: due process of law.**

**Failure to abate nuisance a misdemeanor.**

**Punishment.**

**Election of municipal physician or health officer.**

**Regulations, salaries and penalties.**

Whenever and wherever a nuisance shall exist which in the opinion of the county physician or county health officer is dangerous to the public health, it shall be his duty to notify in writing the parties responsible for its continuance, of the character of the nuisance and the means of abating it. Upon this notification, the parties shall proceed to abate the nuisance: *Provided, however,* that if the party notified shall make oath or affirmation before a justice of the peace of his or her inability to carry out the directions of the county physician or county health officer, it shall be done at the expense of the town, city, or county in which the offender lives. In the latter case the limit of the expense chargeable to the city, town, or county shall not be more than one thousand dollars in any case: *Provided, further,* that nothing in this section shall be construed to give the county physician or county health officer the power to destroy or injure property without a due process of law as now exists for the abatement of nuisances.

#### SEC. 13. *Nuisance; failure to abate.*

If any person, firm, corporation, or municipality responsible for the existence and continuance of a nuisance, after being duly notified in writing by the county physician or county health officer to abate said nuisance, shall fail to abate the same for twenty-four hours after such notice prescribed, he shall be guilty of a misdemeanor, and shall be fined two dollars a day as long as said nuisance remains.

#### SEC. 14. *Election of municipal physician or health officer; provision for municipal health.*

The authorities of any city or town, not already authorized in its charter, are hereby authorized to elect a municipal physician or municipal health officer when, in their judgment, municipal health would be improved thereby, and to make such regulations, pay such fees and salaries, and impose such penalties as in their judgment may be necessary for the protection and the advancement of the public health.

4458. *Powers of Local Boards Not Affected.*—Nothing in this chapter shall operate as a repeal or abridgment of powers conferred by any special act on any local board of health. Power of local boards not abridged by chapter 95.

**SEC. 15. Duties of the municipal physician or health officer; penalty for nonperformance.**

The duties of the municipal physician, within the jurisdiction of the town or city for which he is elected, shall be identical with those of the county physician for the county, with the exception of the duties of the county physician pertaining to the jail, convict camp, and county home. The authorities of any city or town shall have the power to assign the duties of quarantine officer to the municipal physician or health officer, and in such cases the municipal health officer shall faithfully perform the duties of the quarantine officer as prescribed in sections twenty and twenty-one of this act, and shall be subject to the penalties of the aforesaid sections for refusal or nonperformance of duty. If the physician is employed to devote his entire time to the public health interests of his town or city, he shall be known as the municipal health officer, and he shall discharge all the duties pertaining to the public schools of his town or city which are assigned in section twelve to the county health officer, and such other duties as may be assigned him by the municipal board of health. Any one violating any of the provisions of this section shall be guilty of a misdemeanor, and subject to a fine of not less than ten dollars nor more than fifty dollars. Duties of municipal health officer. Violation of section a misdemeanor. Punishment.

**SEC. 16. Quarantine; quarantine officers.**

All laws, with the exception of section twenty of this chapter, pertaining to the reporting, recording and quarantining of diseases, and all laws pertaining to disinfection, shall be faithfully enforced by the quarantine officer. The county physician, county health officer, municipal physician or municipal health officer shall be eligible to this office. The county board of health, on the first Monday of July, one thousand nine hundred and thirteen, and thereafter on the second Monday of January in the odd years of the calendar, shall elect a quarantine officer for their county, and arrange with such officer to accept and discharge the duties assigned in this chapter to such official, and any other duties relating to the control of infectious diseases which may be assigned him by the county board of health. The quarantine officer shall serve until the second Monday in January of the odd years of the calendar. Persons eligible to office of quarantine officer. Duties of quarantine officer. Term of office.

**SEC. 17. Rules and regulations for quarantine and disinfection; penalty.**

Inland quarantine and disinfection shall be under the control of the quarantine officer, who shall faithfully enforce the rules and regulations governing quarantine and disinfection as prescribed by the local, county or municipal, board of health: *Provided*, that nothing in this section shall interfere with the execution of section twenty of this chapter: *Provided*, that the <sup>Proviso: quarantine of ports.</sup>

quarantine of ports shall not be interfered with, but the officers of the local and State board shall render all aid in their power to quarantine officers in the discharge of their duties, upon the request of the latter: *Provided, further*, that any child or other person may remain in custody and care of parents or family. The failure on the part of the quarantine officer to perform the duties imposed in this section shall be a misdemeanor, and he shall be punished for each offense by a fine of not less than ten dollars nor more than fifty dollars.

**Proviso:** care and custody of children.

**Failure to discharge duties a misdemeanor.**

**Punishment.**

**Neglect or refusal to comply with quarantine a misdemeanor.**

**Punishment.**

If any person shall neglect or refuse to comply with the rules and regulations governing quarantine and disinfection, as prescribed by the local, county, or municipal board of health, he shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than five dollars nor more than fifty dollars, or imprisoned not less than ten days nor more than thirty days, at the discretion of the court. In case the offender be stricken with the disease for which he is quarantinable, he shall be subject to the penalty on recovery, unless in the opinion of the Secretary of the State Board of Health it should be omitted.

#### SEC. 18. *Penalty for refusal or neglect to carry out quarantine.*

**Control of smallpox.**

If any person shall neglect or refuse to comply with the rules and regulations governing quarantine and disinfection, as prescribed by the local, county, or municipal board of health, he shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than five dollars nor more than fifty dollars, or imprisoned not less than ten days nor more than thirty days, at the discretion of the court. In case the offender be stricken with the disease for which he is quarantinable, he shall be subject to the penalty on recovery, unless in the opinion of the Secretary of the State Board of Health it should be omitted.

#### SEC. 19. *The control of smallpox.*

**Notification to public.**

On the appearance of a case of smallpox in any neighborhood, town, or city, the quarantine officer shall use all due diligence to warn the public of its existence and to notify the public of the proper means for preventing its spread; the said warning and notification to be according to the instructions of the State Health Officer. The board of health of any town, city, or county shall have authority to require children attending the public schools to present certificate of immunity from smallpox either through recent vaccination or previous attack of the disease. If any parent, guardian, school committee, principal, or teacher shall permit a child to violate such a requirement of the aforesaid authorities, he or she shall be guilty of a misdemeanor, and fined not less than ten dollars or more than fifty dollars.

**Certificates of immunity.**

**Persons permitting violation guilty of misdemeanor.**

**Punishment.**

**Smallpox warning.**

4451. *Vaccination.*—On the appearance of a case of smallpox in any neighborhood, due warning of the existence of the disease shall be given, and all persons not able to pay shall be vaccinated free of charge by the county physician or health officer or by the municipal physician or health officer, and the county physician or health officer shall vaccinate every person admitted into a public institution, jail or county home as soon as practicable,

**Free vaccination.**

unless he is satisfied, upon examination, that the person is already successfully vaccinated; the money for vaccine to be furnished by county commissioners. The board of health of any city, town, or county may make such regulations and provisions for the vaccination of the inhabitants of their city, town or county, and impose such penalties as they may deem necessary to protect public health.

**Vaccination of inmates of public institutions.**

**County commissioners to pay for.**

**Vaccination rules.**

**SEC. 20. *Control of yellow fever, plague, cholera, and typhus fever.***

Any householder who knows that a person within his family or house, and any physician who suspects that a person whom he is called to treat is sick with yellow fever, bubonic plague, Asiatic cholera, or typhus fever, shall immediately give notice thereof to the quarantine officer, and the quarantine officer in turn shall immediately notify, by telegram, the Secretary of the State Board of Health thereof. The Secretary of the State Board of Health shall personally assume control of the quarantine of the aforesaid diseases and shall promulgate such rules and regulations governing their control as he deems wise. Any one violating this section or the rules and regulations made by the Secretary of the State Board of Health, as directed by this section, shall be, upon conviction, guilty of a misdemeanor, and fined not less than fifty dollars (\$50) nor more than two hundred dollars (\$200), or imprisoned not less than ten (10) nor more than sixty (60) days.

**SEC. 21. *Precaution against contamination.***

In the interest of the public health, every person, company, or municipal corporation or agency thereof selling water to the public for drinking and household purposes shall take every reasonable precaution to protect from contamination and assure the healthfulness of such water, and any provisions in any charters heretofore granted to such persons, companies, or municipal corporations in conflict with the provisions of this section are hereby repealed. The State Board of Health shall have the general oversight and care of all inland waters, and shall from time to time, as it may deem advisable, cause examinations of said waters and their sources and surroundings to be made for the purpose of ascertaining whether the same are adapted for use as water supplies for drinking and other domestic purposes, or are in a condition likely to impair the interests of the public or of persons lawfully using the same, or to imperil the public health. For the purpose aforesaid, it may employ such expert assistants as may be necessary. The said board shall make such reasonable rules and regulations as in its judgment may be necessary to prevent contamination and to secure other purifications as may be required to safeguard the public health. Any individual, firm, corporation, or municipality, or the person or persons responsible for management of the water supply, failing to comply with said rules and regulations, shall be guilty of a misdemeanor, and upon conviction shall be fined or imprisoned, or both, at the discretion of the court. The State Board of Health shall from time to time consult with and advise the boards of all State institutions, the authorities of cities and towns, corporations or firms already having or intending to introduce systems of water supply, drainage or sewerage, as to the most appropriate source of supply, the best practical method of assuring the purity thereof; or of disposing of their drainage or sewage, having regard to the present and pros-

Notification for yellow fever,  
plague, cholera, and typhus fever.  
State health officer to take charge.  
Penalty for violation.  
Oversight and care of inland waters.  
Examination of waters.  
Expert assistants.  
Failure to comply a misdemeanor.  
Punishment.  
Consultation with institutions, municipalities and private parties on water systems.

Plans to be submitted to state board.

No contract to be made by state institutions or municipalities until plans approved by state board.  
Plans of water systems to be filed.

Noncompliance with section a misdemeanor. Punishment.

Power to condemn lands.

Proceedings for condemnation.

Entry of land for laying pipes.

Entry for repairs.

Assessment of damages.

Inspections of watersheds.

pective needs and interests of other cities, towns, corporations, or firms which may be affected thereby. All such boards of directors, authorities, corporations, and firms are hereby required to give notice to said board of their intentions in the premises and to submit for its advice outlines of their proposed plans or schemes in relation to water supplies and disposal of sewage, and no contract shall be entered into by any State institution or town for the introduction of a system of water supply or sewage disposal until said advice shall have been received, considered, and approved by the said board. That for the purpose of carrying out the general provisions of this section, every municipal or private corporation, company, or individual supplying or authorized to supply water for drinking or other domestic purposes to the public shall file with the Secretary of the State Board of Health, within ninety days after the receipt of notice from said secretary, certified plans and surveys, in duplicate, pertaining to the source from which the water is derived, the possible source of infections thereof, and the means in use for the purification thereof, in accordance with the directions to be furnished by the said secretary. Failure on the part of any individual, firm, corporation, or municipality to comply with this section shall be a misdemeanor, and upon conviction those responsible theréfor shall be fined not less than fifty dollars nor more than one hundred dollars, at the discretion of the court.

#### *SEC. 22. Condemnation of lands.*

All municipalities operating water systems and sewer systems, and all water companies operating under charter from the State or license from municipalities, which may maintain public water supplies, may acquire by condemnation such lands and rights in lands and water as are necessary for the successful operation and protection of their plants, said proceedings to be the same as prescribed by law for acquiring right of way by railroad companies.

#### *SEC. 23. May enter upon lands to lay pipes, etc.*

For the purpose of providing water supplies, the directors or other lawful managers of any public institution of the State may enter upon the lands through which they desire to conduct their pipes for said purpose, and lay them underground, and they at all times shall have the right to enter upon said lands for the purpose of keeping the water line in repair and do all things to that end.

#### *SEC. 24. Compensation for land.*

If damages shall be claimed for the use of such lands, and the parties can not agree as to the amount of compensation to be paid, they may proceed in the manner now provided by law for railroad companies to procure right of way.

#### *SEC. 25. Inspections of watersheds.*

Any waterworks that derive their water from a surface supply shall have a quarterly sanitary inspection of the entire watershed, except in those cases where the supply is taken from large creeks

or rivers that have a minimum daily flow of ten million gallons, in which case the inspection shall apply to the fifteen miles of watershed above the waterworks intake. Such water companies shall cause to be made a sanitary inspection of any particular locality on said watershed at least once in every week, whenever in the opinion of the board of health of the city or town to which the water is supplied, or, when there is no such local board of health, in the opinion of the county superintendent of health or in the opinion of the State Board of Health, there is special reason to apprehend the infection of the water from that particular locality by the germs of typhoid fever or cholera. The inspection of the entire watershed as herein provided for shall include a particular examination of the premises of every inhabited house on the watershed, and, in passing from house to house, a general inspection for dead bodies of animals or accumulation of filth. It is not intended that the term "entire watershed" shall include uninhabited fields and wooded tracts that are free from suspicion. The inspection shall be made by an employee of and at the expense of said water company in accordance with reasonable instructions as to methods, scope, and details, to be furnished by the Secretary of the State Board of Health. The said sanitary inspector shall give in person to the head of each household on said watershed or, in his absence, to some member of said household, the necessary directions for the proper sanitary care of his premises. It shall further be the duty of said inspector to deliver to each family residing on the watershed such literature on pertinent sanitary subjects as may be supplied him by the municipal health officer or by the Secretary of the State Board of Health. Full report in duplicate of all such inspections shall be made promptly to the Secretary of the State Board of Health and their accuracy certified to by the affidavit of the inspector, or such officer or person as the said secretary may direct.

#### SEC. 26. *Inspections of watersheds; penalty for failure.*

Failure on the part of those having in charge the management of public water supplies to comply with the law requiring sanitary inspections of watersheds shall be a misdemeanor and punished by a fine of not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment for not less than ten nor more than thirty days: *Provided*, the said official does not prove to the satisfaction of the court that, in spite of reasonable effort and diligence on his part, he was prevented, directly or indirectly, by his superiors from doing his duty in this respect; in which case the said superior officer shall be deemed guilty of a misdemeanor and punished by a fine of not less than fifty dollars nor more than two hundred dollars, or by imprisonment for not less than one nor more than six months.

#### SEC. 27. *Inspectors may enter upon premises.*

Each sanitary inspector herein provided for is authorized and empowered to enter upon any premises and into any building

upon his respective watershed for the purpose of making the inspections required.

**SEC. 28. Residents on watersheds to obey instructions.**

Residents on watershed to obey instructions.

Every person residing or owning property on the watershed of a lake, pond, or stream from which a drinking supply is obtained shall carry out such reasonable instructions as may be furnished him in the matter hereinbefore set forth directly by the municipal

Refusal or neglect a misdemeanor.

Punishment.

health officer or by the State Board of Health. Any one refusing or neglecting to comply with the requirements of this section shall be guilty of a misdemeanor and fined not less than ten nor more than fifty dollars, or imprisoned for not less than ten nor more than thirty days.

**SEC. 29. Damage to water supply.**

Defilement or corruption of water supply a misdemeanor.

Defilement or corruption defined.

Injury to water works a misdemeanor.

If any person shall defile, corrupt, or make impure any well, spring, drain, branch, brook, creek, or other source of public water supply by collecting and depositing human excreta on the watershed, or depositing or allowing to remain the body of a dead animal on the watershed, or in any other manner, and if any person shall destroy or injure any pipe, conductor of water, or other property pertaining to an aqueduct, or shall aid and abet therein, he shall be guilty of a misdemeanor.

**SEC. 30. Sewage not discharged in.**

Discharge of sewage forbidden.

Remedy by injunction.

No person, firm, corporation, or municipality shall flow or discharge sewage above the intake into any drain, brook, creek or river from which a public drinkink water supply is taken, unless the same shall have been passed through some well known system of sewage purification approved by the State Board of Health; and the continued flow and discharge of such sewage may be enjoined upon application of any person.

**SEC. 31. Discharging sewage into certain streams.**

Discharge of sewage into water supply a misdemeanor.

If any person, firm, or corporation, or other officer of any municipality having a sewerage system in charge shall violate the provision of the law relating to discharging sewage into streams from which public water is taken, he shall be guilty of a misdemeanor.

**SEC. 32. Towns, etc., not having sewerage systems.**

Settlements and institutions on watershed to maintain system for disposal of excreta.

Refusal or neglect a misdemeanor.

Punishment.

All schools, hamlets, villages, towns, or industrial settlements which are now located or may be hereafter located on the shed of any public water supply, not provided with a sewerage system, shall provide and maintain a reasonable system approved by the State Board of Health for collecting and disposing of all accumulations of human excrement within their respective jurisdiction or control. Any one refusing or neglecting to comply with the requirements of this section shall be guilty of a misdemeanor and fined not less than ten dollars nor more than fifty dollars or imprisoned for not less than ten nor more than thirty days.

**SEC. 33. State Laboratory of Hygiene; analyses of water, sputum, blood, etc., appropriation for; tax against water companies. (Preventive treatment of rabies, chapter eight hundred and ninety-one, Laws of one thousand nine hundred and seven.)**

For the better protection of the public and to prevent the spread of communicable diseases, there shall be established a State Laboratory of Hygiene, the same to be under the control and management of the State Board of Health, and it shall be the duty of the State Board of Health to have made in such laboratory monthly examinations of samples from all public water supplies of the State, of all waters sold in bottle or other package and of all spring waters that are maintained and treated as an adjunct to any hotel, park, or resort for the accommodation or entertainment of the public: *Provided*, that in the case of springs in connection with hotels, parks, or resorts intermittently operated, examinations of the water shall be made monthly during the period only that they are open for the accommodation and entertainment of the public; but if upon the examination of the water of any such spring it shall be found to be infected or contaminated with intestinal bacilli or other impurities dangerous to health, examinations shall be made weekly until its purity and safety are shown. The board shall also cause to be made examinations of well and spring waters when in the opinion of any county superintendent of health or any registered physician there is reason to suspect such waters of being contaminated and dangerous to health. The board shall likewise have made in this laboratory examinations of sputum in cases of suspected tuberculosis, or throat exudates in cases of suspected diphtheria, of blood in cases of suspected typhoid and malarial fever, of feces in cases of suspected hookworm disease, and such other examinations as the public health may require. For the support of the said laboratory the sum of four thousand dollars annually is hereby appropriated and an annual tax of sixty-four dollars, payable quarterly, by each and every water company, municipal, corporate, and private, selling water to the people: *Provided*, that the said annual tax for waters from springs or wells sold in bottles or otherwise shall be as follows: For springs or wells the gross annual sales from which for the previous calendar year are less than two thousand and more than one thousand five hundred dollars, fifty dollars; less than one thousand five hundred and more than one thousand dollars, forty dollars; less than one thousand and more than five hundred dollars, thirty dollars; less than five hundred and more than two hundred and fifty dollars, twenty dollars, and less than two hundred and fifty dollars, fifteen dollars; and for any spring maintained and treated as an adjunct to any hotel, park, or resort for the accommodation and entertainment of the public, fifteen dollars, and an additional tax for water sold in bottle or other package from said spring in accordance with the above schedule. Every corporation, firm, or person selling water in the manner set forth in this proviso shall file with the Treasurer of the State Board of Health, within sixty days of the end of the month in which the tax is imposed, a report of the amount of water sold in bottles or packages during the preceding month, and shall pay to the State Board of Health the amount of tax due on such sales. The State Board of Health shall issue a certificate of payment to each person so reporting and paying.

Double tax for failure to file report.	days after the passage of this act and annually thereafter in the month of January, an affidavit as to the gross amount received from sale of water for the previous calendar year, and upon this affidavit the tax for the current year shall be based. Failure to so file said affidavit within the time prescribed shall subject the said corporation, firm, or person so failing to file said affidavit to double the tax for the current year. Failure to transmit sample within five days after receipt of sterilized bottle or container from the Laboratory of Hygiene shall be a misdemeanor, and upon conviction shall subject the delinquent to a fine of twenty-five dollars.
Failure to transmit sample a misdemeanor.	Transportation charges.
Punishment.	Analyses of purchased samples.
Collection of tax.	Printing and stationery.
License to foreign water sellers.	Proviso: evidence of purity.
Publication of infection.	Information of result of analysis.
Proviso: therapeutic waters.	That satisfactory evidence of purity furnished by the State laboratory of other States agreeing to reciprocate in this matter with this State shall be accepted in lieu of the said license tax. If water sold by any person, firm, corporation, or municipality shall be discovered by three successive analyses made by the State Laboratory of Hygiene to be dangerous to the public health, publication of that fact shall be made in the monthly Bulletin of the State Board of Health. The result of said analyses shall be immediately forwarded by mail to the person, firm, corporation, or municipality selling the water so analyzed. When upon subsequent analyses the water shall be found no longer dangerous to health, a certificate thereof shall be furnished the person, firm, corporation, or municipality offering the said water for sale, and publication of the fact shall be made in the said monthly Bulletin: <i>Provided</i> , that this act shall not apply to the therapeutic waters so medicated as to render them sterile, the question of their sterility to be decided by the Director of the State Laboratory of Hygiene.
Solicitors to prosecute offenders.	SEC. 34. <i>Duties of solicitors to prosecute infringements.</i>
	That for every violation of sections twenty-five, twenty-six, twenty-seven, twenty-eight, twenty-nine, thirty, thirty-one, thirty-two, thirty-three, thirty-four, thirty-five, thirty-six, and thirty-seven it shall be the duty of the solicitors of the several judicial districts, upon the complaint of the Board of Health, or any of

its officers, or of any individual injured or likely to be injured, to institute criminal action against the person, firm, corporation, or municipality charged with such violation in their respective districts, and prosecute the same.

**SEC. 35. Annual appropriation.**

For carrying out the provisions of this act as to the duties of Appropriation, the Board of Health, twenty-six thousand five hundred dollars, or so much thereof as may be necessary, is hereby annually appropriated, to be paid by the State Auditor on requisition, to be signed by the Secretary and President of the State Board of Health, the same to be apportioned as follows: four thousand to the State Laboratory of Hygiene, eight thousand to the campaign against the hookworm disease, and fourteen thousand five hundred dollars to the executive officer of the State Board of Health, and the printing and stationery necessary for the board <sup>Printing and stationery.</sup> to be furnished upon requisition upon the State Printer: *Provided*, that one thousand dollars of this appropriation be used annually by the State Board of Health to arrange for a supply of diphtheria antitoxin, which shall be available to the citizens <sup>Proviso: diphtheria antitoxin.</sup> of this State at contract price. A yearly statement shall be made <sup>Yearly statements.</sup> to the Governor of all money received and expended in pursuance of this act.

**SEC. 36. Contingent fund.**

A contingent fund of five thousand dollars is appropriated, sub-<sup>Contingent appro-</sup> ject to the Auditor's warrant, upon the recommendation of the Governor, to be expended in pursuance of the provisions of this act, when rendered necessary by the visitation of cholera or any other pestilential disease.

**SEC. 37** That all laws and clauses of laws in conflict with this act are hereby repealed.

**SEC. 38.** That this act shall be in force from and after its ratification.

Ratified this the 12th day of March, A. D. 1913.

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[Chapter 891, Laws of 1907.]

**AN ACT AUTHORIZING THE STATE BOARD OF HEALTH TO PROVIDE FOR THE PREVENTIVE TREATMENT OF HYDROPHOBIA.**

**SECTION 1. Preventive treatment for rabies.**

That the State Board of Health is hereby authorized and em-<sup>Treatment for rabies.</sup> powered to provide for and have conducted under its direction the preventive treatment of hydrophobia or rabies, whenever in its judgment circumstances, financial and otherwise, will justify it.

To meet the expenses of this treatment the said board is hereby <sup>Board may supplement revenue.</sup> given authority to supplement the revenue derived from fees for the treatment by such sums from the treasury of the State Laboratory of Hygiene as may be necessary: *Provided*, that the useful-<sup>Provided, efficiency not impaired.</sup> ness and efficiency of the said laboratory is not thereby impaired.

**SEC. 2. *Arrangements to meet expenses of treatment.***

- Free to indigent.** That the benefits of said treatment shall be given free of charge to all residents of the State who shall present to the Secretary of the State Board of Health or its representative having in charge the management of this special work an affidavit of inability to pay, duly sworn to and subscribed before a justice of the peace or if the case be a minor, such an affidavit by the parent or guardian.
- May demand payment.** To meet as far as may be the expenses of this special work, the State Board of Health is hereby authorized and directed to demand from those able to do so the payment in advance of a reasonable fee, not to exceed in any case the usual charge made by the reputable Pasteur Institutes of this country.
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[Chapter 567, Laws of 1907.]

**AN ACT PROVIDING FOR THE SEPARATION OF PRISONERS SUFFERING WITH TUBERCULOSIS FROM OTHER PRISONERS.**

**SECTION 1. *Tuberculous county prisoners to be kept separate.***

- Separate cells for tuberculous prisoners.** That the board of county commissioners of the respective counties of North Carolina shall provide in the jail house, or in any camp or place where prisoners are committed for keeping or sentenced to a term of imprisonment in any county in the State of North Carolina, separate cells or rooms or a place in which shall be confined any prisoner or prisoners who may be committed for keeping or sentenced to said prison or place of confinement for a term of imprisonment who has been examined by the county superintendent of health and pronounced by the said county superintendent of health as being affected with tuberculosis.

**SEC. 2. *County superintendent of health to examine tuberculous suspects.***

- When sheriff suspects tuberculosis county superintendent to examine.** That it shall be the duty of any sheriff of any county, when a prisoner is placed in his custody for the purpose of being committed to jail or any place of confinement mentioned in this act who, said sheriff has been informed or has any reason to believe or suspect, is suffering with tuberculosis, to have any such prisoner examined by the county superintendent of health, and if such prisoner shall be pronounced by the said county superintendent of health as a tuberculous prisoner, then said prisoner shall be separated from the other prisoners and confined in a separate cell or place provided for by this act.

**SEC. 3. *Tuberculous State prisoners to be kept separate.***

- Separate cells.** That it shall be the duty of the Board of Directors of the State's Prison to provide separate cells or apartments in the said State's Prison in which shall be kept any prisoner or prisoners who may be sentenced to that institution for a term of imprisonment, who, after being examined, are pronounced by the physician in charge as being affected with tuberculosis.

**SEC. 4. *Management of cells for the tuberculous.***

That the cells and places of confinement provided for in this act for prisoners affected with tuberculosis shall be kept exclusively for said tuberculous prisoners, and under no circumstances or conditions shall any other prisoner committed or sentenced to the institutions and places of imprisonment mentioned in this act, who is well and not affected with tuberculosis, be confined in the cells or places of confinement therein provided for tuberculous prisoners: *Provided, further,* that when said cells or places of confinement provided for in this act, either in the county jails or camps or the State's Prison, have been used and occupied by any prisoners affected with tuberculosis, the said cells or places of confinement shall not be used for any other prisoners until the county superintendent of health or the physician in charge and health authorities of the State's Prison have been notified and the said cells or places of confinement have been thoroughly fumigated and disinfected under the supervision of the said county superintendent of health or the physician in charge and the health authorities of said State's Prison, in the manner prescribed and required by the State Board of Health.

**SEC. 5. *Authorities of jails and prisons knowing or suspecting that a prisoner has tuberculosis must have him examined.***

Whenever any prisoner or prisoners shall be committed to any of the prisons or places of confinement designated in this act, it shall be the duty of the sheriff of the county or the warden of the State's Prison, as the case may be, in the event any such prisoner or prisoners be known or suspected by said authorities to be suffering with tuberculosis, to have any such prisoner or prisoners examined by the county superintendent of health or the physician in charge within five days after they have been committed or sentenced to said prison.

**SEC. 6. *All prisoners may be worked together.***

That nothing contained in this act shall be so construed as to interfere with or prevent the county or State authorities from working together all prisoners on public works as now provided for by law.

**SEC. 7. *Violation of this act a misdemeanor.***

That any person or persons violating any of the terms or provisions of this act shall be guilty of a misdemeanor, and upon conviction shall be punished in the discretion of the court.

**SEC. 8. This act shall be in force from and after August 1, 1907.**

Ratified this the 4th day of March, A. D. 1907.

[Chapter 474, Laws of 1907.]

**AN ACT REQUIRING RAILROAD COMPANIES TO KEEP THEIR PASSENGER CARS AND TOILET ROOMS CLEAN AND DECENT.**

**SECTION 1. *Passenger cars to be cleaned and provided with toilets.***

Passenger cars to be cleaned. That every person or railroad company, whether incorporated or not, engaging in the regular business of carrying passengers on its railroad cars in this State, shall have the passenger cars on their roads cleaned, brushed and dusted and the windows washed, if needed, at least once each day, and have in each car in which male and female passengers are carried therein a toilet room for each sex and have the same kept clean.

Toilet rooms for male and female.

Railroads to enforce law.

Penalty for failure.

Conductor guilty of misdemeanor: when.

**SEC. 2. *Railroad authorities to enforce this law.***

Any person or corporation engaged in the business described in section one of this act who shall willfully or negligently fail or refuse to give orders to their agent or agents in charge of such cars and comply with the requirements of this act shall forfeit twenty dollars for each day that it refuses, to be recovered by any person suing for said penalty.

**SEC. 3. *Conductors and managers responsible.***

That the willful or negligent refusal or the failure on the part of the conductor or manager of any such passenger car as named in section one to comply with said section one shall be received as evidence of such failure or refusal of such person or railroad company to give such orders, and moreover, such conductor or manager shall be guilty of a misdemeanor if he fails or refuses to carry out said orders of the person or company mentioned in section one of this act.

**SEC. 4. That this act shall take effect from and after the first day of May, 1907.**

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**AN ACT TO AMEND CERTAIN SECTIONS OF CHAPTERS 81 AND 89 OF THE REVISAL OF 1905 OF NORTH CAROLINA, AND CERTAIN CHAPTERS OF THE PUBLIC LAWS OF 1907, 1909, AND 1911 OF NORTH CAROLINA, BEING PARTS OF THE PUBLIC SCHOOL LAW.**

*The General Assembly of North Carolina do enact:*

**SECTION 1. That chapter eighty-nine of The Revisal of one thousand nine hundred and five be, and the same is, hereby amended as follows:**

(a) Strike out section four thousand one hundred and sixteen and insert in lieu thereof the following:

**"4116. Apportionment of school funds; reservation of contingent fund.** The county board of education shall, on the first Monday in January and the first Monday in July of each year, apportion the school fund of the county to the various school districts;

Dates for apportionment.

but it shall, before apportioning the school fund, reserve as a Contingent fund, contingent fund an amount sufficient to pay the salary of the county superintendent and *per diem* and expense of the county board of education; and may further reserve as a fund for building and repairing schoolhouses and for equipment, in counties with a total school fund of five thousand dollars or less, not more than twenty per centum thereof; in counties with a total school fund of over five thousand dollars and not more than ten thousand dollars, not more than sixteen per centum thereof; in counties with a total school fund of over ten thousand dollars and not more than twenty-five thousand dollars, not more than ten per centum thereof; in counties with a total school fund of over twenty-five thousand dollars, not more than seven and a half per centum thereof, to be used as directed in section four thousand one hundred and twenty-four. It shall be the duty of the county board of education to distribute and apportion the school money so as to give to each school in the county for each race the same length of school term, as nearly as may be, each year. In making the apportionment the board shall have proper regard for the grade of work to be done and the qualifications of the teachers required in each school for each race. As soon as the apportionments are made, it shall be the duty of the board to notify the school committeemen and the treasurer of the county school fund of the amount apportioned to each school, designating each school by number, and stating whether for white, colored or Indian, and naming the township and county. Funds unused by any district during any year shall, if still unused at the January meeting subsequent to the close of the school year, be returned to the general school fund for reapportionment, unless such district shall have been prevented from using such funds during that year by providential or other unavoidable causes: *Provided*, that in the discretion of the county board of education it may also reserve sufficient funds, after first providing for a six months' school term in every school district, to pay a part of the cost, not to exceed one-half, necessary to employ a capable physician for his entire time as county health officer, whose election meets with the approval of said board and whose duties shall be specified by the county board of health to embrace those provided for in that part of section eleven, chapter sixty-two, of the public health laws of one thousand nine hundred and eleven relating to the medical inspection of schools and school children; and he shall lecture to the teachers in their meetings and supply them with printed instructions regarding measures for the proper care of the body, the recognition and prevention of disease, the recognition, prevention and correction of physical defects, etc.; and he shall keep an accurate daily record of the work he does under the provisions of this act and make weekly, monthly or quarterly reports giving such information as may be called for by blanks to be furnished by and returned to both the county board of education and the State Superintendent of Public Instruction; and if the county health officer should neglect for a period of ninety days to carry

Reserve for building and repairs.

Apportionment to races.

Grade of work and qualification of teachers.

Notice of apportionment.

Surplus returned for reapportionment.

Proviso: reserve for employment of physician.

Lectures to teachers by physicians.

Records and reports.

Withdrawal of aid.

out the spirit of this act, unless his entire time should be required to fight an epidemic of some contagious or infectious disease, the county board of education may, in its discretion, withdraw its financial aid in his employment."

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[Chapter 109, Public Laws 1913.]

**AN ACT TO PROVIDE FOR THE REGISTRATION OF ALL BIRTHS AND DEATHS IN THE STATE OF NORTH CAROLINA.**

*The General Assembly of North Carolina do enact:*

State Board of Health given charge.

Instructions, forms and blanks.

Local and central registration.

Uniform and thorough enforcement.

Recommendation for additional legislation.

State Registrar. Central bureau.

Fireproof space.

Registration districts.

Appointment of local registrars.

Notification to State Registrar.

Term of office.

SECTION 1. That the State Board of Health shall have charge of the registration of births and deaths, shall prepare the necessary instructions, forms and blanks for obtaining and preserving such records, and shall procure the faithful registration of the same in each local registration district as constituted in section three of this act, and in the central bureau of vital statistics at the capital of the State. The said board shall be charged with the uniform and thorough enforcement of the law throughout the State, and shall from time to time recommend to the General Assembly any additional legislation that may be necessary for this purpose.

SEC. 2. That the Secretary of the State Board of Health shall be State Registrar of Vital Statistics, and shall have general supervision over the central bureau of vital statistics, which is hereby authorized to be established by said board. Adequate fireproof space in one of the State buildings for filing cases for the death and birth certificates made and returned under this act shall be provided by the Committee on Public Buildings and Grounds.

SEC. 3. That for the purposes of this act the State shall be divided into registration districts as follows: Each city, each incorporated town, and each township shall constitute a local registration district.

SEC. 4. That within ninety days after the taking effect of this act, or as soon thereafter as possible, the chairman of every board of county commissioners in the State of North Carolina shall appoint a local registrar of vital statistics for each township in his county, and the mayor of every incorporated town or city in the State of North Carolina shall appoint a local registrar of vital statistics for his town or city, and the chairmen of the boards of county commissioners and the mayors of the cities or towns shall notify the State Registrar, in writing, of the name and address of each local registrar so appointed. The term of office of each local registrar so appointed shall be four years, beginning with the first day of January of the year in which the local registrar is appointed, and until his successor has been appointed and has qualified, unless such office shall sooner become vacant by death,

disqualification, operation of law, or other cause: *Provided*, that Proviso: city health officers as registrars. in cities where health officers or other officials are, in the judgment of the State Board of Health, conducting effective registration of births and deaths under local ordinances at the time of the taking effect of this act, such officials may be appointed as registrars in and for such cities, and shall be subject to the rules and regulations of the State Registrar, and to all the provisions of this act. Any vacancy occurring in the office of local registrar Vacancies. of vital statistics shall be filled for the unexpired term by a local registrar appointed by the same official who appointed the local registrar whose retirement creates the vacancy. Any chairman Notification to State Registrar. of a board of county commissioners or mayor of a city or town who appoints a local registrar to fill a vacancy in the office of local registrar shall notify the State Registrar, in writing, of the name and address of the local registrar so appointed. At least Appointment of ten days before the expiration of the term of office of any such local registrar, his successor shall be appointed by the chairman of the board of county commissioners for the township local registration office, and by the mayor of the city or town for the town or city registration office.

Any local registrar who, in the judgment of the Secretary of Removal by State Registrar. the State Board of Health, fails or neglects to discharge efficiently the duties of his office as laid down in this act, or who fails to make prompt and complete returns of all births and deaths, as required thereby, shall be forthwith removed from his office by the Secretary of the State Board of Health and such other penalties may be imposed as are provided under section twenty-two of this act.

Each local registrar shall, immediately upon his acceptance of Local registrars to appoint deputies. appointment as such, appoint a deputy, whose duty it shall be to act in his stead in case of absence, illness or disability, and such Acceptance by deputy. deputy shall in writing accept such appointment, and be subject to all rules and regulations governing local registrars. And when it may appear necessary for the convenience of the people in any Sub-registrars. rural district, the local registrar is hereby authorized, with the approval of the State Registrar, to appoint one or more suitable persons to act as sub-registrars, who shall be authorized to receive certificates and to issue burial or removal permits in and for such portions of the district as may be designated; and each sub-Certificates for- registrar shall note on each certificate, over his signature, the warded to local date of filing, and shall forward all certificates to the local registrar of the district within ten days, and in all cases before the third day of the following month: *Provided*, that each sub- Proviso: supervi- registrars shall be subject to the supervision and control of the sion and control of State Registrar. and may be by him removed for neglect or failure Removal for to perform his duties in accordance with the provisions of this cause. act or the rules and regulations of the State Registrar, and he shall be subject to the same penalties for neglect of duties as the local registrar.

SEC. 5. That the body of any person whose death occurs in this State, or which shall be found dead therein, shall not be in- Permit for burial, removal or other disposition of dead bodies.

tered, deposited in a vault or tomb, cremated or otherwise disposed of, or removed from or into any registration district, or be temporarily held pending further disposition more than seventy-two hours after death, unless a permit for a burial, removal or other disposition thereof shall have been properly issued by the local registrar of the registration district in which the death occurred or the body was found. And no such burial or removal permit shall be issued by any registrar until a complete and satisfactory certificate of death has been filed with him as hereinafter provided: *Provided*, that outside of incorporated towns and cities and within incorporated towns having a population of five hundred or less, no burial permit shall be required,

**Certificate of death.**

**Proviso:** localities exempt from burial permits.

**Registrar to ascertain and report deaths.**

**Proviso:** burial permits for bodies brought into district.

**Shipment of body and place of death noted.**

**Compensation of registrar.**

**Registration of stillborn children.**

**Certificate of birth.**

**Proviso:** certificate of death in miscarriage.

**Medical certificate.**

**Burial or removal permit.**

**Midwives shall not sign certificates.**

**Deaths without medical attendance.**

**Items of death certificate.**

**Place of death.**

SEC. 6. That a stillborn child shall be registered as a birth and also as a death, and separate certificates of both birth and death shall be filed with the local registrar, in the usual form and manner, the certificate of birth to contain in place of the name of the child, the word "stillbirth": *Provided*, that a certificate of birth and a certificate of death shall not be required for a child that has not advanced to the fifth month of uterogestation. The medical certificate of the cause of death shall be signed by the attending physician, if any, and shall state the cause of death as "stillborn," with the cause of the stillbirth, if known, whether a premature birth, and, if born prematurely, the period of uterogestation, in months, if known; and a burial or removal permit of the prescribed form shall be required. Midwives shall not sign certificates of death for stillborn children; but such cases, and stillbirths occurring without attendance of either physician or midwife, shall be treated as deaths without medical attendance, as provided for in section eight of this act.

SEC. 7. That the certificate of death shall contain the following items, which are hereby declared necessary for the legal, social and sanitary purposes subserved by registration records:

(1) Place of death, including state, county, township or town, village or city. If in a city, the ward, street and house number; if in a hospital or other institution, the name of the same to be

given instead of the street and house number. If in an industrial camp, the name of the camp to be given.

(2) Full name of decedent. If an unnamed child, the surname Name of decedent preceded by "Unnamed."

(3) Sex.

Sex.

(4) Color or race—as white, black, mulatto (or other negro Color or race. descent), Indian, Chinese, Japanese, or other.

(5) Conjugal condition—as single, married, widowed, or di-Conjugal condition. vorced.

(6) Educational attainments—as illiterate, able to read and write, common school education or equivalent, high school education or equivalent, college education or equivalent. If the deceased is less than fifteen years of age the educational attainments Educational attainments of parent or of the mother, if living, or of the father, if living, or of the guardian. guardian in the order named, shall be given.

(7) Date of birth, including the year, month and day. Date of birth.

(8) Age, in years, months and days. If less than one day, the Age. hours or minutes. If exact information is unobtainable, give approximate age.

(9) Occupation. The occupation to be reported of any person who had any remunerative employment, stating (a) trade, profession or particular kind of work; (b) general nature of industry, business or establishment in which employed (or employer).

(10) Birthplace; at least state or foreign country, if known. Birthplace.

(11) Name of father. Name of father.

(12) Birthplace of father; at least state or foreign country, if known. Birthplace of father.

(13) Maiden name of mother. Maiden name of mother.

(14) Birthplace of mother; at least state or foreign country, if known. Birthplace of mother.

(15) Signature and address of informant. Signature and address of informant.

(16) Official signature of registrar, with the date when certificate was filed, and registered number. Signature of registrar.

(17) Date of death—year, month and day. Date of death.

(18) Certification as to medical attendance on decedent, fact and time of death, time last seen alive, and the cause of death, with contributory secondary cause or complication, if any, and duration of each, and whether attributed to dangerous or insatiable conditions of employment; signature, date of signature, and address of physician or official making the medical certificate.

(19) Length of residence (for inmates of hospitals and other institutions; transients or recent residents) at place of death and in the State, together with the place where disease was contracted, if not at place of death, and former or usual residence.

(20) place of burial or removal; date of burial. Place and date of burial.

(21) Signature and address of undertaker or person acting as such. Signature and address of undertaker.

The personal and statistical particulars (items one to thirteen) shall be authenticated by the signature of the informant, who may be any competent person acquainted with the facts. Authentication of items.

Authentication of disposition of body.	The statement of facts relating to the disposition of the body shall be signed by the undertaker or person acting as such.
Authentication of medical certificate.	The medical certificate shall be made and signed by the physician, if any, who last treated the deceased for the disease or injury which caused death, and such physician shall specify the time in attendance, the time he last saw the deceased alive, and the hour of the day at which death occurred, and he shall further state the cause of death, so as to show the course of disease or sequence of causes resulting in the death, giving first the name of the disease causing death (primary cause), and the contributory (secondary) cause, if any, and the duration of each. Indefinite and unsatisfactory terms, denoting only symptoms of disease or conditions resulting from disease, will not be held sufficient for the issuance of a burial or removal permit; and any certificate containing any such indefinite or unsatisfactory terms, as defined by the State Registrar, shall be returned to the physician or person making the medical certificate for correction and more definite statement. Causes of death, which may be the result of either disease or violence, shall be carefully defined; and, if from violence, the means of injury shall be stated, and whether (probably) accidental, suicidal, or homicidal. And in deaths in hospitals, institutions, or of nonresidents, the physician shall supply the information required under this head (item eighteen), if he is able to do so, and may state where, in his opinion, the disease was contracted.
Certificates returned.	
Cause of death carefully defined.	
Deaths in hospitals, institutions or of nonresidents.	
Notice of death without medical attendance.	SEC. 8. That in case of any death occurring without medical attendance, it shall be the duty of the undertaker or person acting as such to notify the local registrar of such death, and when so notified the registrar shall, prior to the issuance of the permit, inform the local health officer and refer the case to him for immediate investigation and certification: <i>Provided</i> , that when the local health officer is not a qualified physician; or when the death takes place in a township registration district, or where there is no such official, and in such cases only, the registrar is authorized to make the certificate and return from the statement of relatives or other persons having adequate knowledge of the facts: <i>Provided, further</i> , that if the registrar has reason to believe that the death had been due to unlawful act or neglect, he shall then refer the case to the coroner or other proper officer for his investigation and certification. And any coroner or other proper officer whose duty it is to hold an inquest on the body of any deceased person, and to make the certificate of death required for a burial permit, shall state in his certificate the name of the disease causing death, or if from external causes, (1) the means of death; and (2) whether (probably) accidental, suicidal, or homicidal; and shall, in any case, furnish such information as may be required by the State Registrar in order properly to classify the death.
Reference to local health officer. Proviso: certificates from statements of relatives and other persons.	
Proviso: reference to coroner.	
Certificate of coroner.	
Undertaker to file certificate of death and obtain permit.	SEC. 9. The undertaker, or person acting as undertaker, shall file the certificate of death with the local registrar of the district in which the death occurred, and obtain a burial or removal per-

mit, prior to any disposition of the body. The undertaker or person acting as such shall obtain the required personal and statistical particulars from the person best qualified to supply them, over the signature and address of his informant. The undertaker or person acting as such shall then present the certificate to the attending physician, if any, or to the health officer or coroner, as directed by the local registrar, for the medical certificate of the cause of death and other particulars necessary to complete the record, as specified in sections seven and eight. And the undertaker or person acting as such shall then state the facts required relative to the date and place of burial, over his signature and with his address, and present the completed certificate to the local registrar in order to obtain a permit for burial, removal or other disposition of the body. The undertaker or person acting as such shall deliver the burial permit to the person in charge of the place of burial, before interring or otherwise disposing of the body; or shall attach the removal permit to the box containing the corpse, when shipped by any transportation company; said permit to accompany the corpse to its destination, where, if within the State of North Carolina, it shall be delivered to the person in charge of the place of burial.

Every person, firm or corporation selling a casket shall keep a record showing the name of the purchaser, purchaser's post-office address, name of deceased, date of death, and place of death of deceased, which record shall be open to inspection of the State Registrar or his agent at all times. On the first day of each month the person, firm or corporation selling caskets shall report to the State Registrar each sale for the preceding month, on a blank provided for that purpose: *Provided, however, that no person, firm or corporation selling caskets to dealers or undertakers only shall be required to keep such record, nor shall such report be required from undertakers when they have direct charge of the disposition of a dead body.*

Every person, firm or corporation selling a casket at retail, and not having charge of the disposition of the body, shall enclose within the casket a notice furnished by the State Registrar, calling attention to the requirements of the law, a blank certificate of death, and the rules and regulations of the State Board of Health concerning the burial or other disposition of a dead body.

SEC. 10. That if the interment, or other disposition of the body is to be made within the State, the wording of the burial or removal permit may be limited to a statement by the registrar, over his signature, that a satisfactory certificate of death having been filed with him, as required by law, permission is granted to inter, remove or dispose otherwise of the body, stating the name, age, sex, cause of death, and other necessary details upon the form prescribed by the State Registrar.

SEC. 11. That no person in charge of any premises in which interments are made shall inter or permit the interment or other disposition of any body unless it is accompanied by a burial, re-

Endorsement and return of permits. Removal or transit permit, as herein provided. And such person shall endorse upon the permit the date of interment, over his signature, and shall return all permits so endorsed to the local registrar of his district within ten days from the date of interment.

Record of interments. He shall also keep a record of all bodies interred or otherwise disposed of on the premises under his charge, in each case stating the name of each deceased person, place of death, date of burial or disposal, and name and address of the undertaker; which record shall at all times be open to official inspection:

*Provided,* that the undertaker, or person acting as such, when burying a body in a cemetery or burial ground having no person in charge, shall sign the burial or removal permit, giving the date of burial, and shall write across the face of the permit the words "No person in charge," and file the burial or removal permit within ten days with the registrar of the district in which the cemetery is located.

Registration of births. SEC. 12. That the birth of each and every child born in this State shall be registered as hereinafter provided.

Certificates filed within ten days. SEC. 13. That within ten days after the date of each birth there shall be filed with the local registrar of the district in which the birth occurred a certificate of such birth, which certificate shall be upon the form adopted by the State Board of Health with a view of procuring a full and accurate report with respect to each item of information enumerated in section fourteen of this act.

Physician, midwife or person acting as midwife to file certificate. In each case where a physician, midwife, or person acting as midwife, was in attendance upon the birth, it shall be the duty of such physician, midwife or person acting as midwife to file in accordance herewith the certificate herein contemplated.

Certificates where no physician, midwife or person acting as midwife was in attendance. In each case where there was no physician, midwife or person acting as midwife, in attendance upon the birth, it shall be the duty of the father or mother of the child, the householder or owner of the premises where the birth occurred, or the manager or superintendent of the public or private institution where the birth occurred, each in the order named, within ten days after the date of such birth, to report to the local registrar the fact of such birth.

Local registrar to secure information. In such case and in case the physician, midwife, or person acting as midwife, in attendance upon the birth is unable, by diligent inquiry, to obtain any item or items of information contemplated in section fourteen of this act, it shall then be the duty of the local registrar to secure from the person so reporting, or from any other person having the required knowledge such information as will enable him to prepare the certificate

Persons reporting birth to afford information. of birth herein contemplated, and it shall be the duty of the person reporting the birth or who may be interrogated in relation thereto, to answer correctly and to the best of his knowledge all questions put to him by the local registrar which may be calculated to elicit any information needed to make a complete record

Verification of statement. of the birth as contemplated by said section fourteen, and it shall be the duty of the informant as to any statement made in accordance herewith to verify such statement by his signature, when requested so to do by the local registrar.

SEC. 14. That the certificate of birth shall contain the following items, which are hereby declared necessary for the legal, social, and sanitary purposes subserved by registration records:

(1) Place of birth, including state, county, township or town, village or city. If in a city, the ward, street, and house number; if in a hospital or other institution, the name of the same to be given instead of the street and house number.

(2) Full name of child. If the child dies without a name before the certificate is filed, enter the surname preceded by "Un-named." If the living child has not yet been named at the date of filing certificate of birth, the space for "full name of child" is to be left blank, to be filled out subsequently by a supplemental report, as hereinafter provided.

(3) Sex of child.

Sex.

(4) Whether a twin, triplet, or other plural birth. A separate certificate shall be required for each child in case of plural births.

Twins, triplets or  
other plural  
births.

(5) For plural births, number of each child in order of birth.

Order in plural  
births.

(6) Legitimate or illegitimate: *Provided*, that in illegitimate births the word "illegitimate" shall be written across the face of the certificate and all items on the certificate which would in any way reveal the identity of the father, mother, or illegitimate child itself shall be omitted.

Legitimate or  
illegitimate  
births.

(7) Date of birth, including the year, month and day.

Date of birth.

(8) Full name of father: *Provided*, that if the child is illegitimate, the name of the putative father shall not be entered without his consent, but the other particulars relating to the putative father (items nine to thirteen) may be entered if known, otherwise as "Unknown."

Name of father.  
Proviso: omissions  
in cases of illegiti-  
mate births.

(9) Residence of father.

Residence of  
father.

(10) Color or race of father.

Color or race.

(11) Educational attainments—illiterate, able to read and write, common school education or equivalent, high school education or equivalent, college education or equivalent.

Educational  
attainments.

(12) Age of father at last birthday, in years.

Age of father.

(13) Birthplace of father; at least state or foreign country, if known.

Birthplace of  
father.

(14) Occupation of father. The occupation to be reported if engaged in any remunerative employment, with the statement of

father.

(a) trade, profession, or particular kind of work; (b) general nature of industry, business or establishment in which employed (or employer).

(15) Maiden name of mother.

Maiden name of  
mother.

(16) Residence of mother.

Residence of  
mother.

(17) Color or race of mother.

Color or race.

(18) Educational attainments—illiterate, able to read and write, common school education or equivalent, high school education or equivalent, college education or equivalent.

Educational  
attainments.

(19) Age of mother at last birthday, in years.

Age of mother.

(20) Birthplace of mother; at least state or foreign country, if known.

Birthplace of  
mother.

Occupation of mother.

(21) Occupation of mother. The occupation to be reported if engaged in any remunerative employment, with the statement of (a) trade, profession, or particular kind of work; (b) general nature of industry, business or establishment in which employed (or employer).

Number of children born.

(22) Number of children born to this mother, including present birth.

Number of children living.  
Certification of attending physician or midwife.

(23) Number of children of this mother living.

(24) The certification of attending physician or midwife as to attendance at birth, including statement of year, month, day (as given in item seven), and hour of birth, and whether the child was born alive or stillborn. This certification shall be signed by the attending physician or midwife, with date of signature and address; if there is no physician or midwife in attendance, then by the father or mother of the child, householder, owner of the premises, or manager or superintendent of public or private institution where the birth occurred, or other competent person, each in the order named, whose duty it shall be to notify the local registrar of such birth, as required by section thirteen of this act.

Certificate if no physician or midwife is in attendance.

(25) Exact date of filing in office of local registrar, attested by his official signature, and registered number of birth, as hereinafter provided.

Date of filing.

Registered number.

Blank for report of name.

SEC. 15. That when any certificate of birth of a living child is presented without the statement of the given name, then the local registrar shall make out and deliver to the parents of the child a special blank for the supplemental report of the given name of the child, which shall be filled out as directed, and returned to the local registrar as soon as the child shall have been named.

Persons in charge of institutions to record personal and statistical particulars of inmates.

SEC. 16. That all superintendents or managers, or other persons in charge of hospitals, almshouses, lying-in or other institutions, public or private, to which persons resort for treatment of diseases, confinement, or are committed by process of law, shall make a record of all the personal and statistical particulars relative to the inmates in their institutions at the date of approval of this act, which are required in the forms of the certificates provided for by this act, as directed by the State Registrar; and thereafter such record shall be, by them, made for all future inmates at the time of their admittance. And in case of persons admitted or committed for treatment of disease, the physician in charge shall specify for entry in the record the nature of the disease, and where, in his opinion, it was contracted. The personal particulars and information required by this section shall be obtained from the individual himself if it is practicable to do so; and when they can not be so obtained, they shall be obtained in as complete a manner as possible from relatives, friends or other persons acquainted with the facts.

Record of nature of disease.

Obtainment of facts.

State Registrar to prepare and supply blanks and forms.

SEC. 17. That the State Registrar shall prepare, have printed, and supply to all registrars all blanks and forms used in registering, recording and preserving the returns, or in otherwise

carrying out the purposes of this act; and shall prepare and issue such detailed instructions as may be required to procure the uniform observance of its provisions and the maintenance of a perfect system of registration; and no other blanks shall be used than those supplied by the State Registrar. He shall care-  
fully examine the certificates received monthly from the local registrars, and if any such are incomplete or unsatisfactory he shall require such further information to be supplied as may be necessary to make the record complete and satisfactory. And all persons having knowledge of the facts, are hereby required to supply, upon a form provided by the State Registrar, or upon the original certificate, such information as they may possess regarding any birth or death upon demand of the State Registrar, in person, by mail, or through the local registrar: *Provided*, that no certificate of birth or death, after its acceptance for registration by the local registrar, and no other record made in pursuance of this act, shall be altered or changed in any respect otherwise than by amendment properly dated, signed and witnessed.

The State Registrar shall further arrange, bind and permanently preserve the certificates in a systematic manner, and shall prepare and maintain a comprehensive and continuous card index of all births and deaths registered; said index to be arranged alphabetically, in the case of deaths, by the names of decedents, and in the case of births, by the names of fathers and mothers. He shall inform all registrars what diseases are to be considered infectious, contagious, or communicable and dangerous to the public health, as decided by the State Board of Health, in order that when deaths occur from such diseases proper precautions may be taken to prevent their spread.

At the expiration of five years after the ratification of this act, certified copies of birth registration certificates shall be accepted by public school authorities in this State as *prima facie* evidence of age of children registering for school attendance and no other proof shall be required. At the expiration of fourteen years from the passage of this act, certified copies of birth registration certificates shall be required by all factory inspectors, and employers of youthful labor, as *prima facie* proof of age, and no other proof shall be required from children born in this State or states which had registration laws essentially identical with this act: *Pro- vided*, that when it is not possible to secure such certified copy of birth registration certificate for any child, the school authorities and factory inspectors may accept as secondary proof of age any competent evidence by which the age of persons is usually established.

If any cemetery company or association, or any church or historical society or association, or any other company, society or association, or any individual, is in possession of any record of births or deaths which may be of value in establishing the genealogy of any resident of this State, such company, society, asso-

Detailed instructions.

Examination and completion of certificates.

Persons required to supply information.

*Provided*: authentication as to changes.

Arrangement, preservation and binding of certificates.

Alphabetical arrangement.

Information as to infectious, contagious or communicable and dangerous diseases.

Certificates required by factory inspectors and employers of youthful labor.

*Provided*: secondary evidence.

Copies of ancient records filed with State Registrar.

- Preservation, record and index.** ciation or individual may file such record or a duly authenticated transcript thereof with the State Registrar, and it shall be the duty of the State Registrar to preserve such record or transcript and to make a record and index thereof in such form as to facilitate the finding of any information contained therein. Such record and index shall be open to inspection by the public, subject to such reasonable conditions as the State Registrar may prescribe. If any person desires a transcript of any record filed in accordance herewith, the State Registrar shall furnish the same upon application, together with a certificate that it is a true copy of such record, as filed in his office, and for his services in so furnishing such transcript and certificate he shall be entitled to a fee of (fifty cents per hour or fraction of an hour necessarily consumed in making such transcript) and to a fee of fifty cents for the certificate, which fees shall be paid by the applicant.
- Record and index open to inspection.**
- Certified transcript of record.**
- Fee for transcript and certificate.**
- Local registrars to supply blanks. Examination of certificate.** SEC. 18. That each local registrar shall supply blank forms of certificates to such persons as require them. Each local registrar shall carefully examine each certificate of birth or death when presented for record in order to ascertain whether or not it has been made out in accordance with the provisions of this act and the instructions of the State Registrar; and if any certificate of death is incomplete or unsatisfactory, it shall be his duty to call attention to the defects in the return, and to withhold the burial or removal permit until such defects are corrected. All certificates, either of birth or of death, shall be written legibly, in durable black ink, and no certificate shall be held to be complete and correct that does not supply all of the items of information called for therein, or satisfactorily account for their omission. If the certificate of death is properly executed and complete, he shall then issue a burial or removal permit to the undertaker: *Provided*, that in case the death occurred from some disease which is held by the State Board of Health to be infectious, contagious or communicable and dangerous to the public health, no permit for the removal or other disposition of the body shall be issued by the registrar, except under such conditions as may be prescribed by the State Board of Health. If a certificate of birth is incomplete, the local registrar shall immediately notify the informant, and require him to supply the missing items of information if they can be obtained. He shall number consecutively the certificates of birth and death, in two separate series, beginning with number one for the first birth and the first death in each calendar year, and sign his name as registrar in attest of the date of filing in his office. He shall also make a complete and accurate copy of each birth and each death certificate registered by him in a record book supplied by the State Registrar, which record book the local registrar shall deposit with the register of deeds of the county not later than the fifteenth of January each year.
- Procurement of missing items.**
- Numbering certificates.**
- Attestation.**
- Record books.**
- Deposit of record books.**
- Index of records.**
- Records for official inspection.**

each month, transmit to the State Registrar all original certificates registered by him for the preceding month. And if no births or deaths occurred in any month the local registrar shall, on the tenth day of the following month, report that fact to the State Registrar, on a card provided for such purpose.

SEC. 19. That each local registrar shall be paid the sum of twenty-five cents for each birth certificate and each death certificate properly and completely made out and registered with him, correctly recorded and promptly returned by him to the State Registrar, as required by this act. And in case no births or deaths were registered during any month, the local registrar shall be entitled to be paid the sum of twenty-five cents for each report to that effect, but only if such report be made promptly as required by this act. All amounts payable to a local registrar under the provisions of this section shall be paid by the treasurer of the county in which the registration district is located, upon certification by the State Registrar. And the State Registrar shall certify every three months to the treasurers of the several counties the number of births and deaths properly registered, with the names of the local registrars and the amounts due each at the rates fixed herein: *Provided*, that the chairman of the board of county commissioners of the several counties may have the right to make such agreements with the several local registrars and sub-registrars as may be agreed upon between said chairman and the local registrars or sub-registrars as to the compensation to be paid local registrars or sub-registrars.

SEC. 20. That the State Registrar shall, upon request, supply to any applicant a certified copy of the record of any birth or death registered under provisions of this act, for the making and certification of which he shall be entitled to a fee of fifty cents, to be paid by the applicant: *Provided*, that the United States Census Bureau may obtain, without expense to the State, transcripts or certified copies of births and deaths without payment of the fees herein prescribed. And any such copy of the record of a birth or death, when properly certified by the State Registrar, shall be *prima facie* evidence in all courts and places of the facts therein stated. For any search of the files and records when no certified copy is made, the State Registrar shall be entitled to a fee of fifty cents for each hour or fractional part of an hour of time of search, said fee to be paid by the applicant. And the State Registrar shall keep a true and correct account of all fees by him received under these provisions, and turn the same over to the treasurer of the State Board of Health.

SEC. 21. That any person, who for himself or as an officer, agent or employee of any other person, or of any corporation or partnership, (a) shall inter, cremate or otherwise finally dispose of the dead body of a human being, or permit the same to be done, or shall remove said body from the primary registration district in which the death occurred or the body was found, without the authority of a burial or removal permit issued by the

Or refusal to furnish information.	local registrar of the district in which the death occurred or in which the body was found; or (b) shall refuse or fail to furnish correctly any information in his possession, or shall furnish false information affecting any certificate or record, required by this act; or (c) shall willfully alter, otherwise than as provided by section seventeen of this act, or shall falsify any certificate of birth or death, or any record established by this act; or (d) being required by this act to fill out a certificate of birth or death and file the same with the local registrar, or deliver it, upon request, to any person charged with the duty of filing the same, shall fail, neglect or refuse to perform such duty in the manner required by this act; or (e) being a State Registrar, a chairman of a board of county commissioners, a mayor of a city or town, a local registrar, a deputy registrar, or sub-registrar, shall fail, neglect or refuse to perform his duty as required by this act and by the instructions and direction of the State Registrar thereunder, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall for the first offense be fined not less than five dollars (\$5.00) nor more than fifty dollars (\$50.00), and for each subsequent offense not less than ten dollars (\$10.00) nor more than fifty dollars (\$50.00), or be imprisoned in the county jail not more than thirty days, or be both fined and imprisoned in the discretion of the court.
Or furnishing false information.	
Or alter or falsify record or certificate.	
Or fail, neglect or refuse to perform any duty.	
Or being an officer fail, neglect or refuse to perform any duty.	
Guilty of misdemeanor.	
Punishment: first offense.	
Subsequent offenses.	
Duty of local registrar.	SEC. 22. That each local registrar is hereby charged with the strict and thorough enforcement of the provisions of this act in his registration district, under the supervision and direction of the State Registrar. And he shall make an immediate report to the State Registrar of any violation of this law coming to his knowledge, by observation or upon complaint of any person or otherwise.
Reports of violation of act.	
Duty of State Registrar.	The State Registrar is hereby charged with the thorough and efficient execution of the provisions of this act in every part of the State, and is hereby granted supervisory power over local registrars, deputy local registrars, and sub-registrars, to the end that all of its requirements shall be uniformly complied with.
Powers.	
Investigation of irregularity or violation of law.	The State Registrar, either personally or through an accredited representative, shall have authority to investigate cases of irregularity or violation of law, and all registrars shall aid him, upon request, in such investigations. When he shall deem it necessary, he shall report cases of violation of any of the provisions of this act to the prosecuting attorney of the county, or the solicitor of the district, with a statement of the facts and circumstances; and when any such case is reported to him by the State Registrar the prosecuting attorney or solicitor of the district, as the case may be, shall forthwith initiate and promptly follow up the necessary court proceedings against the person or corporation responsible for the alleged violation of law. And upon request of the State Registrar, the Attorney-General shall likewise assist in the enforcement of the provisions of this act.
Reports to prosecuting officers.	
Action by prosecuting officers mandatory.	
Assistance of Attorney-General.	
Appropriation.	SEC. 23. That for the purposes of the thorough execution of this act the sum of ten thousand dollars, or as much thereof as

may be necessary, is hereby annually appropriated to be paid by the State Auditor on requisition signed by the president and secretary of the State Board of Health. The printing and stationery necessary for the execution of this act shall be supplied by the State Printer upon the requisition of the State Registrar.

SEC. 24. That all laws and parts of laws in conflict with the Repealing clause, provisions of this act are hereby repealed; and no system for the Local systems registration of births and deaths shall be continued or maintained in any of the several municipalities of this State other than the one provided for and established by this act.

SEC. 25. That this act shall be in force and effect on and after When act effective, the first day of July, one thousand nine hundred and thirteen.

In the General Assembly read three times, and ratified this the 10th day of March, 1913.

**Minutes of Call Meeting of the State Board of Health**

RALEIGH, N. C., January 24, 1913.

All the members of the Board were present except Doctors Laughinghouse and Ashcraft.

The President asked the Secretary to state the object of the meeting. Dr. Rankin stated that the object of the meeting was to consider the legislative program that the Board wished to present to the General Assembly of 1913, and especially the increase in the appropriation to be asked for. The Secretary suggested that a good plan of procedure would be to request the different departments of the Board to state their respective needs. The President then called upon Dr. Shore to state the needs of the Laboratory.

Dr. Shore said he thought the greatest need of the Laboratory was an extension of the work that would permit the Laboratory to produce its own diphtheria antitoxin, to make and distribute typhoid vaccine, and to make its own anti-rabic vaccine. He stated that this would cost about \$5,000 for construction and \$3,000 for maintenance. Dr. Shore stated that during the last twelve months the Laboratory had saved the State \$21,280 through the reduction in the price of diphtheria antitoxin brought about through the provision in the State law that permitted the Laboratory to contract with the manufacturers of antitoxin and to distribute the antitoxin contracted for at wholesale prices to the people of the State. Dr. Shore stated that at present antitoxin could be bought for something less than fifty cents a thousand units. Dr. Shore said he estimated that we had saved the State something like \$75,000 in the last few years in the Pasteur treatment that had been administered to citizens of the State who had been bitten by rabid animals.

Dr. Lewis called attention to the proposal of the Department of Agriculture to establish a farm for producing hog cholera serum, and said that it might be well for Dr. Shore to take up with the Agricultural Department the proposition of a co-operative laboratory for the production of all serums, which might very materially lower the cost.

Dr. Shore further stated that in addition to the antitoxin appropriation requested he would need \$1,000 additional increase in the general appropriation for the Laboratory to take care of the natural growth of the work. Dr. Shore further asked that \$2,000 additional increase for the production and distribution of typhoid vaccine be requested, making the total increase in the Laboratory appropriation asked for \$11,000.

The President of the Board then called upon Dr. Ferrell to state the legislative needs of his work. Dr. Ferrell submitted to the Board a budget of his present work and also of proposed work in which he pointed out the need of an annual increase of \$5,000.

At the request of the President, Dr. Ferrell told how the county appropriations of from \$250 to \$300 for the dispensary campaigns were used. He called attention to the fact that since the Commission began work 181,144 specimens had been examined and 111,172 people had been treated. Dr. Ferrell suggested that the additional \$5,000 for hookworm work be requested in the form of a separate bill.

The President then asked the Secretary if he wished to say anything to the Board. Dr. Rankin stated that he would be glad to discuss the needs of the executive office and also to correlate the various legislative needs of the Board. Dr. Rankin stated that the present appropriation of the State Board of Health in toto amounts to \$27,000. Of this amount \$5,000 is revenue not appropriated directly from the State Treasury, but paid in the form of taxes by public water companies directly to the Treasurer of the State Board of Health. Deducting this \$5,000 we have \$22,000 left. This \$22,000 is apportioned as follows: \$12,000 to the Executive Office, \$4,000 to the State Laboratory of Hygiene, \$1,000 for diphtheria antitoxin to be distributed by the State Laboratory of Hygiene, and \$5,000 for hookworm work.

The expenses of the Executive Department last year were \$16,553, or \$4,553 in excess of the apportionment. The Board should find out if the Executive Office is wasting money, and if it is not, should decide on increasing the funds for this division of the work or instruct the Secretary to drop some of the work. The Secretary then pointed out that during the past year certain expenses in the work of the Executive Office had been met that will not be so great in the future. These expenses were in the form of permanent improvements, \$2,000 of which was for the cost of a multigraph and mailing outfit. Dr. Rankin also pointed out the fact that as soon as the State Board of Health could move into their new offices in the Supreme Court Building they would save something like \$400 a year in office rents, which could be applied to other purposes. The Secretary pointed out on the other hand that it would be necessary to increase Mr. Booker's salary from \$1,500 a year to \$2,000, and that a plate-making machine, which would cost about \$350, would be needed to complete the mailing outfit. Dr. Rankin gave it as his estimate that the Executive Office running on its present schedule of work would require an increased appropriation of \$4,000, making the total amount available to the Executive Office \$16,000 a year.

The Secretary then pointed out that in the Vital Statistics Bill which would be presented and which everyone seemed to consider as a fundamental need, an appropriation of \$10,000 for its enforcement was called for. The Secretary pointed out further that if \$1,500 was added to this amount, it would enable the Board by combining the office of Inspector for Vital Statistics with the office of epidemiologist, to secure an epidemiologist, which would make an important extension of the work at a very slight additional cost.

The Secretary called attention to the fact that the total appropriations asked for by Doctors Shore, Ferrell and himself amounted to \$11,000 additional appropriation for Dr. Shore, \$5,000 additional appropriation for Dr. Ferrell, \$4,000 additional appropriation for the Executive Office, and \$13,500 additional appropriation for the Vital Statistics Law and epidemiological work, all of which added to the \$22,000 now appropriated would make a total appropriation of \$54,000. The Secretary raised the question as to whether or not it would be wise for the State Board of Health to ask for such an enormous increase in the appropriation—that is, practically doubling the present appropriation, increasing the appropriation from \$27,000 to \$54,000. The Secretary pointed out that it would seem to him to be the part of wisdom for the Board to ask

for a smaller appropriation than the combined appropriation called for, and, if the Board took that position, that it would then be necessary for the Board to determine what part of the proposed increase it could eliminate with the least harm to the health work of the State. Dr. Rankin advocated the elimination of the appropriation called for for the establishment and maintenance of an antitoxin farm and he also advocated that the appropriation be asked for in an omnibus bill and that the Legislature should leave to the discretion of the State Board of Health the proper apportionment of the appropriation to the various divisions of the work.

After considerable discussion by President Way, Doctors Gordon, Lewis, Ferrell and Shore, it was finally moved and carried that a total appropriation of \$30,000 be requested exclusive of the water tax and printing and that the increase in the appropriation be apportioned \$4,000 to the Executive Office, \$1,000 to the Laboratory, \$5,000 for Hookworm Work, and \$2,000 to the Laboratory in the order named.

The Secretary called attention to the fact that a hotel inspection bill which would be introduced would carry an appropriation of \$2,600 to be derived from the license fees from hotels which would defray the expense of the hotel inspection.

Dr. Lewis moved that a special bill for the creation of a laboratory to manufacture diphtheria antitoxin be introduced. This resolution was seconded and carried. The Secretary was instructed, however, to say to the Appropriation Committee in case any of the \$30,000 appropriation, as provided for above, should be in jeopardy on account of the proposed antitoxin appropriation, that the antitoxin appropriation was less important and was less needed than the increase of the general appropriation.

Dr. Ferrell called attention to an amendment which he had considered with Mr. Joyner which would permit the school board of a county to pay a part of the salary of a whole time county health officer. The Board expressed its approval of the proposed legislation.

After Dr. Rankin had called attention to several minor matters in the way of amendments to existing legislation, a motion to adjourn was carried.

W. S. RANKIN, *Secretary.*

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**Minutes of the Meeting of the Executive Committee of the State Board  
of Health**

RALEIGH, N. C., February 11, 1913.

The Executive Committee was called to order by President J. Howell Way. Dr. Lewis, of the Executive Committee, was absent.

The Secretary stated that the purpose of the meeting was to hear representatives from the towns of Rocky Mount and Louisburg with reference to the sewage disposal of the town of Louisburg.

Mr. Bassett, appearing for the town of Rocky Mount, stated that section 33, chapter 62, Public Laws of 1911, prohibited the discharge of raw sewage into any stream in the State of North Carolina from which a public water supply was taken; that the statutes provided that any

individual corporation or city could appeal to the courts for an injunction against the discharge of sewage into the public water supply; that the town of Rocky Mount did not want to carry the matter into the courts.

Mr. Bassett called attention to the fact that when Greenville complained against Rocky Mount for discharging sewage into the Tar River, from which Greenville got her public water supply, the Board of Health issued an order requiring Rocky Mount to make arrangements for a proper disposal of her sewage, and that now the town of Rocky Mount asked the Board to take the same action in behalf of Rocky Mount as the Board had taken against Rocky Mount in behalf of Greenville. To that end Rocky Mount requested that the Board investigate the sewage disposal arrangement in the town of Louisburg and require Louisburg to properly purify her sewage before discharging it into the Tar River, from which Rocky Mount takes her water supply, and in that way save the town of Rocky Mount the expense and trouble of litigation.

Mayor Holden of Louisburg, then stated that if it was shown that Louisburg was polluting Tar River to the detriment of the water supply of Rocky Mount and to the danger of the health and lives of the citizens of Rocky Mount, that Louisburg would not resist the appeal of Rocky Mount. Mayor Holden stated that the sewer connections were few in number; that the distance, according to the flow of the river, from Louisburg to Rocky Mount, was very great; that the amount of water in the river was sufficient to bring about very considerable purification of the sewage; and that all of these things combined made any dangerous pollution of the water supply of Rocky Mount uncertain.

On being asked the distance from Louisburg to Rocky Mount, Mayor Holden replied that he thought the distance along the river was about sixty miles. Mr. Bassett stated that he thought it was about fifty miles.

Mayor Holden stated that the total number of the connections of the sewer from offices, stores and residences in Louisburg was about 1,750; that there was only one factory on the outer edge of town and that it was without sewer connection; that in the college located in the town there were only about sixty or seventy boarding students and that they were away in the summer; that there was no common sewer in Louisburg, but that the sewage went into the river through five separate lines. Mayor Holden stated further that on account of the town being located on both sides of the river, that two or more purification plants would be needed if the Board required the installation of purification plants.

The fact was brought out, too, that a heavy underlying stratum of rock would interfere very much with the laying of sewer pipes. It was stated by a representative of Rocky Mount that the hypochlorite used in the purification of water was costing Rocky Mount about \$7.20 per week and the services of a man who received from \$1 to \$1.50 per day. Mayor Holden stated that the town of Louisburg was already heavily in debt and that the town would have serious if not insurmountable obstacles in securing a sufficient amount of money to put in sewage purification plants.

Mr. Bassett stated that in his opinion Louisburg would not be put to anything like the expense of Rocky Mount in installing sewerage; that

he thought it was within the ability of any town of North Carolina to take care of its own sewage, and that inasmuch as the State Board of Health had established a precedent in requiring Rocky Mount to put in a purification plant for the sake of Greenville, that the Board should adhere to its precedent and not make it impossible for Rocky Mount to get relief without going to the courts. Mr. Bassett stated that Louisburg should be as ready to comply with the ruling of the State Board of Health as was Rocky Mount.

Mr. Beck, of Louisburg, stated that on the north side of the river there were ninety-two connections on one common pipe, whereas on the south side of the river there were fourteen on four pipes.

Colonel Ludlow suggested a detention chamber for Louisburg, with the addition of hypochlorite, before discharging the sewage into the river. Mayor Holden stated that the revenue of Louisburg was about \$12,000 a year and that the city had a bonded debt of \$86,000.

Mr. Bassett called attention to the fact that there were a large number of surface closets on the banks of the river in the town. Mayor Holden stated that the authorities of Louisburg had never required connection with the sewer. Mayor Holden thought it would not be wise to attempt this requirement.

Mayor Ramsey of Rocky Mount, emphasized the point that it would be inexpensive for the State Board of Health to require sewage purification in Louisburg, but expensive to the town of Rocky Mount to get this requirement through the courts, and that the State Board of Health should follow its precedent.

The following resolution was then passed by the Executive Committee of the State Board of Health:

*Resolved*, That the provisions of section 33, chapter 62, Health Laws of 1911, should be recognized by the town of Louisburg, and that Louisburg should adopt some means, which will meet with the approval of the Executive Committee of the State Board of Health, of rendering the sewage disposal into the Tar River reasonably harmless to the citizens of Rocky Mount, and that Assistant Secretary Booker inspect conditions at Louisburg with a view of giving them such preliminary advice as is necessary for Louisburg to comply promptly with this resolution.

W. S. RANKIN, *Secretary.*

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#### Annual Meeting of the North Carolina State Board of Health

MOREHEAD CITY, N. C., June 17, 1913.

The annual meeting of the State Board of Health was held at Morehead City, N. C., June 17, 1913. All the members of the Board except Doctor Wood were present.

After calling the Board to order, the President invited the representatives of the city of Raleigh to appear before the Board for the purpose of securing permission to make certain alterations in the public water supply of the city of Raleigh.

Mr. John W. Hinsdale, Jr., Attorney for the city of Raleigh, stated that for a number of years Raleigh had been supplied with water by the

Wake Water Company, a corporation; that in 1911 and 1912 this corporation was unable to comply with their agreement, and while proceedings were being brought against the Wake Water Company by the city of Raleigh, the company was thrown into the hands of a receiver; that Judge Shaw, Mr. Gilbert White and Mr. Hall were appointed by the court as the appraisers for the Wake Water Company; that the appraisers had put the value of \$250,000 on the property; that the city had voted bonds to the amount of \$350,000 and was, therefore, in a position to buy the plant at the price fixed by the appraisers, and to improve the present plant to the extent of \$100,000 additional expenditure.

Mr. Hinsdale stated that it was the desire of the city to use the present water supply, that is, Walnut Creek, and to construct a reservoir of 250,000,000 gallons capacity on a site arranged for through contract by the Wake Water Company with the State Hospital. Mr. Hinsdale stated that the proposed water supply should be ample for the city of Raleigh for thirty years. Mr. Hinsdale stated that the city was ready to go ahead with the corporations proposed and the city water supply, but that the Executive Officer of the State Board of Health had raised the point as to whether other water supplies should not be investigated before the Walnut Creek supply should receive the approval of the State Board of Health. Mr. Hinsdale contended that Walnut Creek would supply an ample quantity of water of good quality to the city of Raleigh, and that the Board of Health had no right to insist on anything further than a sufficient quantity and quality of water.

Mr. Hinsdale then read from reports by Col. J. L. Ludlow, Mr. Gilbert C. White and Mr. Walden, and an affidavit from Prof. W. C. Riddick, to support his contention. Mr. Hinsdale also called attention to the fact that Mr. Hazelhurst, from Atlanta, was not especially impressed with Walnut Creek, but at the time that Mr. Hazelhurst made his investigation and gave his opinion, the arrangement with the State hospital for the site for a reservoir had not been made, and \$100,000 for the improvement of the present plant had not been obtained.

Mr. Hinsdale further stated that the reservoir would be made sanitary, and all of the organic matter removed from the surface of the ground and the edges of the reservoir cut abruptly and sharp so that fish could prevent the development of mosquitoes. He stated, also, that \$5,000 had already been spent in laying an 18-inch pipe.

Dr. Shore on being asked as to the quality of water, more especially as to its bacterial count, replied that since hypochlorite and lime had been used the count was very low.

Prof. W. C. Riddick, special engineer for the city of Raleigh, stated that it was proposed to build a reservoir of 250,000,000 gallons capacity, put in a sufficient pipe line to supply a 3,000,000 power pump, and to install a 400,000 gallon tank in place of the 100,000 gallon tank now in use. He stated that the outline of his plans for altering the reservoir had been filed with the State Board of Health.

Dr. Rankin stated that the proposition from the city of Raleigh raised this question: Whether the State Board of Health, after being satisfied by plans and information as to a proposed public water supply for the city that the supply was ample and of a good quality, should

go further and insist that evidence showing that the proposed supply was the best available for the particular city in question be filed; in this particular case, whether the Board of Health should say to the City of Raleigh that "you must file with us evidence showing not only that Walnut Creek is ample and of proper quality for the public water supply for the city of Raleigh, but that it is, from a sanitary and economic standpoint, the best available supply for the city of Raleigh."

Professor Riddick then read an outline of his proposed plans, and discussed the relative advantages of Walnut Creek from a sanitary and an economic standpoint over every other available supply for the city of Raleigh. He stated that if the city was to go to some other place than Walnut Creek for water, he wanted the State Board of Health to expressly command such action; that it would be against his judgment and that he did not want to in any way be responsible for the selection of any other source of supply than Walnut Creek.

Professor Riddick then stated that the city of Raleigh would file with the State Board of Health all the reports read before the Board at the meeting. Mr. Hinsdale then stated that these records would be certified.

The Board then passed the following resolution, which was introduced by Col. J. L. Ludlow:

*Resolved*, That upon the assurance of Prof. Riddick, appearing as consulting engineer of the city of Raleigh, that after careful investigation of all the available sources of supplies of water to the city of Raleigh he is convinced that in consideration of the financial ability of the city and other considerations that Walnut Creek is the best suited to the needs of the city for a period of many years, and upon the presentment of his outline of the plans proposed for the improvement, including the large impounding reservoir on Walnut Creek, permission is granted for the continuation of Walnut Creek as the source of supply and the execution of the proposed improvements.

The resolution was unanimously adopted.

Dr. Rankin then suggested to the Board that they select an auditor and have the accounts of the State Board of Health audited. He stated that the finances of the Board were in good shape, and that he would be glad to answer any questions that any member of the Board had to ask in regard to the Board's finances. A motion that the Governor be requested to have the books of the State Board of Health audited was offered and carried.

The relation of the State Board of Health to the State Sanatorium was then considered.

Dr. Rankin stated to the Board that he advocated the Board's acquiring control over the management of the State Sanatorium. He stated that it was his belief that the Sanatorium was capable of being converted into one of the most effective agencies in the improvement of the public health that the Board could acquire. He stated that the present Board of Directors of the Institution were tired of their job, and that if the State Board of Health ever expected to acquire the Institution, now was the time to consider the matter. Dr. Rankin went somewhat into detail in discussing the way in which the Institution could be used as a public health agency. He advocated emphasizing the educational side of the work in the management of the Institution; in taking the pa-

tients to train them how to live in a way not to endanger their associates, and allow them to return home after being so instructed, with the view not so much of curing the individual patient, but of preventing the spread of his disease to the other members of the family.

He advocated the establishment of a correspondence school for tuberculosis under the Bureau of Tuberculosis, a subdivision of the State Board of Health work, through the enactment of a law requiring the reporting of the disease with provision for the necessary funds for this work. Dr. Rankin stated that he thought by keeping in touch with the tuberculosis population of the State that the Board could successfully appeal to the counties and towns, to the fraternal orders, the churches and other organizations for the endowment of beds in the Sanatorium. In short, the plan that he proposed was an educational scheme for keeping in close touch with the tuberculous population of the State in order to teach them how to live with safety to others and for distributing the official burden imposed by tuberculosis upon the State to the shoulders of the many political, social, fraternal and religious organizations of the State.

Dr. Rankin enthusiastically advocated the acceptance of the management of the State Sanatorium by the State Board of Health, provided the Board of Directors would turn the Institution over to the State Board of Health.

Dr. Lewis stated that so far the management of the Sanatorium had been an ignominious failure, and that he himself had never been able to recommend the Sanatorium to friends who asked his advice about going there. Dr. Lewis informed the Board that a few nights before the directors of the Sanatorium had met and appointed a committee on organization composed of Dr. J. R. Gordon, President of the Board of Directors, Mr. Henry Page and Dr. W. S. Rankin; that one of the objects of this committee was to bring the Sanatorium into closer relation with the State Board of Health with a view to securing the approval and endorsement of the management of the Institution by the Board.

Dr. Lewis expressed the plan of having the Secretary of the Board of Health appointed Medical Director of the State Sanatorium so that he could have charge of the treatment of the patients, but leave the business management of the Institution in the hands of the old Board of Directors. Dr. Lewis stated that if it was found that the Institution could be built up and made of great service, that by the time of the meeting of the next General Assembly in 1915 the entire management of the Institution could probably be put into the hands of the State Board of Health. Dr. Lewis suggested to the Board that if it met with their approval he would discuss with Mr. Page and Dr. Gordon the advisability of carrying out his suggestion.

At this point Dr. Way asked if there were any records showing the number of patients and the result of treatment. Dr. Lewis stated that the average number of patients at the Sanatorium was about twenty-five, and that he thought at least half of them were advanced consumptives. Dr. Way expressed the opinion that it was because the Sanatorium accepted so many advanced consumptives that the Institution was finding it hard to get along. Dr. Way expressed himself regarding

the proposition of taking over the Sanatorium as very dangerous, and a proposition that should be gone into with great deliberation.

Dr. Lewis discussed the educational phase of sanatorium work, calling attention to a paper that he read in 1909 on this subject. Dr. Lewis pointed out that through the development of a correspondence school to which all cases of tuberculosis should be reported, and through the development of a close personal correspondence with reported cases and with cases that had been treated in the Sanatorium and that had returned home, and by teaching people in the Sanatorium how to live and especially how to live with their families when they should return to them, the Institution could be made of great value in the public health service of the State. Dr. Lewis expressed considerable skepticism as to the feasibility of getting fraternal orders and churches and political organizations, such as counties and towns, financially interested in the support of the Sanatorium.

On asking the Board its advice as to whether he should take up the matter with Dr. Gordon and Mr. Page of having the Secretary appointed Medical Director of the Institution, Dr. Way advised that this matter be gone into slowly, and that as the Board had never had the matter brought before them before, that they adjourn to take up this question on the following day.

Dr. Lewis moved that Mr. Booker's salary be increased to \$2,100 a year and that this increase take effect from the first of April. This motion was unanimously carried.

Dr. Lewis then moved that Miss Allen's salary be increased to \$1,500 a year. This motion was unanimously carried.

Dr. Ferrell then stated to the Board that the Rockefeller Foundation had just been chartered by the State of New York, and that Dr. Wycliff Rose, as administrative secretary of the Foundation, would probably have charge of the public health work of that body. He further stated that Dr. Rose was much impressed with the possibilities of county health work as it was developing in North Carolina, and that it seemed to be his hope to take an active part in the development of county health work. Dr. Ferrell stated that at a conference in Raleigh, composed of himself, Dr. Rose and Dr. Rankin, it was agreed that he call in one of the field men to take temporary charge of the hookworm work in this State while he, Dr. Ferrell, should take charge of the division of county health work. Dr. Ferrell stated that the Commission would probably invest \$500 or more in the county health work in each county in order to secure from the county authorities certain reports so that the work in the various counties could be correlated and a system of county health work developed.

Dr. Ferrell stated that his object in coming before the Board was to state these tentative plans and to ask if the Board had any objections to the plans being carried out in the way indicated.

Dr. Rankin stated that he and Dr. Ferrell were thoroughly in accord in regard to the matter which Dr. Ferrell had presented to the Board. He stated further that he felt sure that it was only a matter of a short time when the Board would lose Dr. Ferrell, as he, Dr. Rankin, knew that Dr. Ferrell was needed in Washington, that he would almost certainly be promoted to a higher position in the Rockefeller Sanitary

Commission work. The Board then expressed itself as favorable to the plan of development of county health work as outlined by Dr. Ferrell.

Dr. Lewis then stated that he had been informed that the Director of the State Laboratory of Hygiene was ready to begin the manufacture of typhoid antitoxin; that he suggested that the Board give its consent to the appropriation and distribution of typhoid vaccine by the Laboratory as soon as this was feasible. The approval was given.

Dr. Rankin then stated that he was frequently called into the various communities as a consultant in regard to the malarial problem; that the greatest practical piece of malarial eradication was now under way in the Panama Canal Zone; that he thought it would be to the advantage of the State if he could visit the Canal Zone to inspect the health work being carried on there, and that he would like to suggest such a trip of inspection to the Board of Health. It was moved and carried that Dr. Rankin visit the Canal Zone for the purpose of inspecting health work under Colonel Gorgas, and that the expenses of this trip be borne by the Board.

Dr. Rankin then called attention to the fact that some member of the last General Assembly slipped in an amendment to the health laws setting aside the requirement that the sanitary engineer member of the Board of Health should be a member of the Executive Committee of the Board; that the effect of that amendment was to leave vacant the position on the Executive Committee formerly occupied by Col. J. L. Ludlow; that in his opinion the Executive Committee would be seriously crippled without the advice of the sanitary member of the Board. It was then moved and carried that Colonel Ludlow be elected a member of the Executive Committee of the State Board of Health.

The Secretary then pointed out that the Board should elect their representative to the American Public Health Association that met in September at Colorado Springs. This matter was left open and the Board adjourned to meet on the following day.

W. S. RANKIN, *Secretary.*

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MOREHEAD CITY, N. C., June 18, 1913.

The Board of Health was called to order by the President. The members present were Doctors Anderson, Ashcraft, Laughinghouse, Lewis, Spencer and Taylor and Colonel Ludlow. Dr. M. L. Stevens of Asheville, a member of the Board of Directors of the State Sanatorium, was present.

The relation of the State Board of Health to the State Sanatorium was again discussed, but no definite action was taken.

Dr. R. H. Lewis was added to the Executive Committee.

It was moved and carried that the President appoint a committee to investigate the efficiency of the offices of the State Board of Health and Laboratory of Hygiene.

A motion to adjourn was made and carried.

W. S. RANKIN, *Secretary.*

**Conjoint Session State Board of Health with North Carolina Medical Society**

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**REPORT OF THE SECRETARY OF THE NORTH CAROLINA STATE  
BOARD OF HEALTH FOR 1912-1913.**

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**W. S. RANKIN, M.D., SECRETARY.**

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*Mr. President, Members of the State Board of Health, and Fellow Members of the North Carolina Medical Society:*

I have the honor to submit, in obedience to section 8, chapter 62, Laws of 1911, this, the annual report of the Secretary of the State Board of Health. I have asked Dr. C. A. Shore, Director of the State Laboratory of Hygiene, and Dr. John A. Ferrell, Assistant Secretary for the Eradication of Hookworm Disease, to prepare and read that part of this report which related to the work of their respective departments. This they have kindly consented to do. I shall deal, therefore, more directly with the general concerns of the Board.

**LEGISLATION BY THE GENERAL ASSEMBLY OF 1913.**

The General Assembly of 1913 made a very favorable record in health legislation.

Probably the most important single piece of legislation enacted by the General Assembly of 1913 was an act requiring the registration of all births and deaths occurring in the State of North Carolina, beginning October first, next. With the single exception of the act establishing a State Board of Health, the registration law is the most important piece of health legislation ever enacted by the General Assembly of North Carolina. The need of such legislation, the absolute necessity for accurate records as to births and deaths for furnishing a true index to the progress of health work, and for supplying facts on which health policies must be intelligently based, has been so thoroughly discussed in Bulletin articles and newspaper articles in this State preliminary to the enactment of the vital statistics bill that it is unnecessary, especially in this society of professional men, to point out the advantages of a registration law for births and deaths.

The particular law adopted is what is known among registration officials of the United States and the world as the "Model Vital Statistics Law." The model law has been prepared by the United States Bureau of the Census and the various State bureaus of vital statistics of the United States. The model bill has existed for about twelve or fifteen years, and either the bill in its entirety or the bill with slight modifications has been adopted by all of the States that have adopted registration laws since the bill was prepared. The model law has been revised every year or so since it was first prepared. The revisions embrace the necessary changes or additions that the experience of registration officials, national and State, suggest to them as helpful or necessary. This model bill, with one or two amendments, was adopted as our registration law. Of the amendments only one was objectionable—an amendment allowing physicians and families in rural districts ten days within which to register deaths. If, however, this amendment should be found, in actual practice, to be of serious hindrance in the execution of the law, we anticipate little trouble in having it removed by some future General Assembly.

The adoption of the model registration law by our State requiring the registration of both births and deaths, and its satisfactory enforcement, which is yet to be accomplished, will make our State the twenty-sixth State in the Union to adopt the registration of deaths, and the thirteenth or fourteenth State to adopt the registration of births.

Another important piece of legislation enacted by the General Assembly was the General Amendments Bill, which amended several sections of the old health law and increased the appropriation to the State Board of Health \$10,000 annually. The new work made possible through the increase in the appropriation is by far the most important feature of this last piece of legislation. Another change in the General Amendments Bill, which is important enough to deserve mention in this connection, has to do with the title of the county health official: Where counties employ physicians to give a pinch of their time to treating diseases, such a physician will be known officially as the county physician. On the other hand, where the county employs a man to give three hundred and sixty-five days a year of his time to the health work of the county, such an employee will be known as the county health officer. This official distinction between county physician and county health officer, replacing the old term "county superintendent of health," that applied to both the man employed for part of his time and the man employed for his full time, is important. If a county employs a man for part of his time to treat its sick convicts and prisoners in the convict camp and jail, and its dependents in the county home, and to make one or two post mortem examinations a year for the coroner, and one or two commitments to the insane asylums of the State, such an employee has no more right to the title of health officer than has the sheriff or jailer of the county. His work is that of a physician treating the least important part of the population. Hereafter, by statute, he will be known as the county physician, and the people of such a county will not be misled by the term "county superintendent of health" into believing that their county is doing health work. Where, on the other hand, the county employs a man to give his entire time to the health interests of the county, ninety-five per cent of his duties will have to do with the prevention of diseases. His work as a physician, that is in treating and attempting to cure disease, will be of little consequence as compared with his work as a health officer in the prevention of disease. Hence such an official will be known hereafter as the county health officer.

For the important legislation outlined above the health officers and health interests of North Carolina, and the people of the State generally are indebted especially to Representatives R. R. Williams, of Buncombe County; B. T. Cox, of Pitt County; J. R. Gordon, of Guilford County, and to Senators F. P. Hobgood, of Guilford County, and I. B. Evans, of Bladen County, whose able leadership had much to do with the favorable attitude of the last General Assembly to public health work.

The Society will recall that at its meeting in Hendersonville last year it passed a resolution asking Hon. John M. Faison, and our other representatives in Congress and Senate of the United States, to use their official influence in securing some favorable action from our National Government directed to the control of pellagra. As you are aware, Dr. Faison, a member of this Society and representing the Third Congressional District, has been successful in obtaining an appropriation of \$45,000 for the study of pellagra. Dr.

Faison is deserving of the appreciation of this Society for his valuable efforts for the prevention of pellagra, one of the worst diseases with which we have to contend.

Another matter which should probably be mentioned here is the successful culmination of the efforts of the American Medical Association, the American Public Health Association, the Committee of One Hundred, and other organizations to secure the appointment of a committee on public health in the United States Congress. Until recently all effort to secure the interest of the lower House in the National Assembly in public health matters has been very much hindered because of the absence of any committee whose special duty was to consider health matters. Public health resolutions and bills heretofore have been referred to the Committee on Interstate Commerce and have received but a small share of the attention of that committee. The Committee on Public Health of the United States Congress recently organized was the result of a motion introduced by Hon. E. W. Pou, representing the Fourth Congressional District. In securing the organization of this committee Mr. Pou has done much to promote the cause of public health and has honored his own State, and is due the gratitude of the North Carolina Medical Society.

#### PRESENT STATUS OF THE STATE'S HEALTH WORK.

The writer recently prepared, at the request of the Secretary of the Southern Sociological Congress, several charts illustrating the fundamental State health policies generally recognized and being developed in the Southern States. The charts are prepared from questionnaires submitted to the secretaries of the State Boards of Health and returned to the writer. The States of Tennessee, Georgia, and Louisiana did not reply to the inquiry, and it is for that reason that the names of those States do not appear on the charts.

Chart No. 1. Shows the years in which ten Southern State Boards of Health were established, the present annual revenue of those boards, the provision for vital statistics in the States mentioned, and the year of establishment, and the number of analyses for the year 1912 of the State laboratories of hygiene of the ten States shown on the chart. The comparison of the work of the laboratories of hygiene as indicated on the charts needs a word of explanation: In some of the States all the examinations of stools for hookworm eggs are made in the laboratories of hygiene, and in other States a large part of such examinations are made in the field.

#### STATE BOARDS OF HEALTH OF SOUTHERN STATES.

State	Organized	Annual Revenue	Vital Statistics	Laboratory of Hygiene	
				Organized	Number Analyses 1912
Virginia-----	1871	\$ 35,000	Model Law adopted.....	1908	\$ 13,770
Maryland.....	1874	35,000	Registration state.....	1893	7,148
South Carolina.....	1878	26,500	No provision.....	1909	5,380
North Carolina.....	1873	50,000	Model Law adopted.....	1905	14,823
Kentucky.....	1878	-----	Registration state.....	1911	36,239
Florida.....	1889	75,000	Model Law provided.....	1913	20,000
Arkansas.....	1913	8,900	Model Law provided.....	1913	-----
Mississippi.....	1877	19,000	Model Law provided.....	-----	-----
Georgia.....	1903	30,500	No provision.....	1905	7,295
Texas.....	1909	49,320	No provision.....	1912	2,164

Chart No. 2. Shows the publicity work in the form of bulletins, press service and lectures being carried on by the ten Southern States, the names of which appear on the chart.

#### EDUCATIONAL ACTIVITIES OF STATE BOARDS OF HEALTH IN SOUTHERN STATES.

State	Bulletins			Press Service		Lectures
	Frequency	Size	Mailing List	Frequency	Number Papers	Number
Virginia.....	Monthly	16-32 pages	20,000	Weekly	165	About 400
Maryland.....	0	0	0	0	0	Many
South Carolina.....	Quarterly	16 pages	12,000	0	0	0
North Carolina.....	Monthly	16-32 pages	40,000	Weekly	250	About 100
Kentucky.....	Monthly	16 pages	4,000	Irregular	250	About 250
Florida.....	Monthly	16 pages	5,000	Weekly	170	Many
Arkansas.....						
Mississippi.....	Monthly	16 pages	5,000	Weekly	4	About 300
Georgia.....	Quarterly	30 pages	5,000	Semi-weekly	150	Many
Texas.....	Monthly	78 pages	5,000	0	0	

Chart No. 3. Shows the protection of public water supplies in the ten Southern States appearing on the chart. The chart indicates four principal safeguards which a State may require of public water supplies owned by municipalities, corporations or individuals for protection of public health. These safeguards are briefly: (a) That no water supply shall be selected until a map of the proposed watershed has been made by a competent engineer, submitted to and approved by the State Board of Health; (b) that preliminary plans and specifications for reservoirs, storage basins, pumping stations, etc., be prepared by an engineer and submitted to the Board for its approval before their adoption; (c) that regular inspections of the watersheds shall be made regularly and reported under oath by those in charge of the water supply to the State Board of Health, and (d) that regular analyses of samples of the water of public water supplies shall be made by the State Laboratory of Hygiene. It will be observed from the chart that our State requires all four of these protective safeguards.

A study of the quarantine regulations in force in the Southern States shows them all equally inefficient, as the generally unsettled status of quarantine and disinfection would suggest. Some of the States make the rules and regulations governing quarantine and disinfection, leave it to local authorities to enforce them, and have no authority whatever for requiring the enforcement of such rules and regulations. Two Southern States, North Carolina and Florida, leave both the making and enforcing of the rules and regulations governing quarantine and disinfection to those concerned—the municipal and county boards of health—believing in the principle of local self-government, and that the local boards that do not appreciate and can not make the proper rules and regulations for quarantine and disinfection can not be depended upon to see that such rules and regulations are enforced if made by State authorities. The management of smallpox without any quarantine is in force in North Carolina and Florida, and practically in force in South Carolina. Five States in the Union are now managing smallpox without quarantine.

## NORTH CAROLINA BOARD OF HEALTH

## MANAGEMENT OF PUBLIC WATER SUPPLIES BY STATE BOARDS OF HEALTH.

State	Watershed Maps	Watershed Inspections		Plans and Specifications Filtration and Sewerage System	Analyses	
		Required	Frequency		Required	Frequency
Virginia.....	Not required	No.....		Not required	No.....	
Maryland.....	Not required	No.....		Not required	No.....	
South Carolina.....	Not required	No.....		Not required	Yes.....	Quarterly
North Carolina.....	Required.....	Yes.....	Quarterly	Required.....	Yes.....	Monthly
Kentucky.....	Required.....	Yes.....	Irregularly	Required.....	Yes.....	Irregularly
Florida.....	Not required	No.....		Not required	No.....	
Arkansas.....	Not required	No.....		Not required	No.....	
Mississippi.....	Not required	No.....		Not required	Yes.....	Irregularly
Georgia.....	Not required	Yes.....	Irregularly	Not required	No.....	
Texas.....	Not required	Yes.....		Not required	No.....	

## THE PRESENT STATUS OF THE STATE'S HEALTH.

Here, again I have endeavored to make the essential features under this heading easily assimilable by the visional route, as the optic nerve is anatomically the most direct and biggest single track from things to thought.

Chart No. 4. Shows the death rates from the principal preventable diseases in North Carolina for the years of 1911 and 1912 as compared with the average death rates for the same diseases in the registration area of the United States.

## DEATH RATE OF NORTH CAROLINA, 1911-1912.

Causes	In Registration Area in N. C., 1911	In Registration Area in N. C., 1912	In Registration Area in U. S., 1911
Total.....	18.3	17.3	14.2
Tuberculosis.....	252.9	234.3	188.9
Pneumonia.....	117.0	87.8	133.7
Typhoid fever.....	68.3	42.0	21.0
Diarrhea (under two years).....	166.1	140.0	77.4
Malaria.....	24.5	33.9	3.0
Whooping cough.....	52.3	28.2	11.3
Measles.....	17.0	9.5	10.0
Scarlet fever.....	2.6	2.3	8.8
Diphtheria.....	10.4	13.2	18.9

Chart No. 5. Shows the actual number of deaths occurring in the State with the death rates shown on Chart No. 4, which were compiled from one-sixth of the State's population made to apply to the entire State.

## ESTIMATED TOTAL DEATHS IN NORTH CAROLINA, 1911-1912.

Causes	Occurring 1911	Occurring 1912	Would Occur with Average Death Rate
All causes.....	42,027	40,893	23,563
Tuberculosis.....	5,805	5,541	3,587
Pneumonia.....	2,746	1,978	3,305
Typhoid fever.....	1,624	962	526
Diarrhea (under two years).....	3,812	3,329	2,555
Malaria.....	570	803	
Whooping cough.....	1,201	668	255
Measles.....	392	227	275
Scarlet fever.....	661	49	260
Diphtheria.....	239	312	479

Chart No. 6. Contains more encouragement than all other facts connected with the health work of this State with which the writer is familiar. It shows changes in the general death rate from 1910 to 1912, and shows further that the reduction in the general death rate has been due to a decrease in the death rate of preventable diseases, and that the death rate from the nonpreventable diseases has remained, during this time, stationary. Of course, the encouragement that this chart gives is circumstantial evidence, not conclusive, but it is a mighty good remedy in times of discouragement.

## TABLE SHOWING DEATH RATES OF PRINCIPAL PREVENTABLE DISEASES.

Death Rate in North Carolina in 1911, 18.3 Per 1,000.  
Death Rate in North Carolina in 1912, 17.3 Per 1,000.

Preventable Diseases	Death Rate	Nonpreventable	Death Rate
Tuberculosis.....	{ 1911-252.9 1912-234.3	Heart Disease.....	{ 1911-134.2 1912-135.3
Typhoid fever.....	{ 1911- 68.3 1912- 42.0	Cancer.....	{ 1911- 52.3 1912- 54.3
Diarrheal diseases.....	{ 1911-166.1 1912-140.0	Bright's disease.....	{ 1911- 98.7 1912-104.1
Contagious diseases.....	{ 1911- 82.6 1912- 53.4	All others.....	{ 1911-970.0 1912-970.0

## IMMEDIATELY AHEAD.

There are two State policies the North Carolina Board of Health must adopt and develop if the board takes advantage of its opportunity and discharges its full responsibility in reducing the State's death rate—the sole object, aim, and ultimate measure of intelligent health work.

First, there must be worked out an efficient system of county health work. The relation of the general work of the State Board of Health and the special work of efficient county boards of health in the treatment of diseases of the body politic may be compared to the relation of a tonic and specific in the

treatment of the sick individual. The educational work of the State Board of Health and its supervision over intercounty matters and its fostering care over local boards of health has a general remedial effect on the health of the State as a tonic improves the general vitality of a patient. The efficient local board of health is like a specific or local remedy applied directly to the seat of the trouble. The death rate of the State will decline under the influence of a central organization, but, if the death rate of the State is to be reduced to the lowest figure that our power of preventing disease imposes upon responsible and intelligent citizens, then the efficient county board of health is an absolute necessity in State health work.

For the last two or three months and during the next two to four years one of the principal objects of the State Board of Health will be to develop a uniform, efficient and satisfactory system of county health work.

We hope to secure the employment, within the next month or six weeks, by at least ten counties of the State of North Carolina, of a whole time health officer. We then propose, through direct assistance to such counties, to correlate their work and to develop some uniform standard by which the work of county health officers can be graded, and by which those who make distinct progress will be recognized and rewarded for their efficiency.

Second, it is now time for the North Carolina State Board of Health to adopt a definite policy with regard to tuberculosis. Why? Because from now on the efficiency of the North Carolina State Board of Health is going to be accurately and justly measured. When, after the registration law has been in force a year and the death rates of North Carolina are known, the people will require, as they have a perfect right to do, that there shall be a decline in the general and special death rates of this State after a reasonable time. Not to be willing to stand on this platform and to be measured accordingly is not to deserve the confidence of the people of this State. If we fail to reduce the death rates of North Carolina it not only means that we shall have been weighed in the balances and found wanting, but it will give public health work in North Carolina, and throughout the South, a setback that will take years of work to offset and cost thousands and tens of thousands of human lives. Recognizing, then, our grave responsibility and realizing that it will be absolutely impossible to shun it, even if we desired, we come face to face with this fact: That one-fourth of the opportunity of a board of health to reduce death rates has to do with one disease, namely, tuberculosis, which causes one-fourth of all preventable deaths. It, therefore, follows that it is incumbent upon those entrusted with the responsibility of reducing the death rate to make a distinction in their attitude toward tuberculosis and their attitude toward other diseases comparatively unimportant when measured beside the Great White Plague. One of the lines of advance during the next year for the North Carolina State Board of Health will be directed specifically against tuberculosis. Already plans are in making but as yet not quite mature enough to be turned loose in the world.

If the past in the health work of this State has been encouraging, the possibilities of the future, and the very near future, too, are so masterfully alluring that it is becoming hard for some of us interested in health work to dream and not make dreams our master.

**REPORT OF THE DIRECTOR OF THE STATE LABORATORY OF  
HYGIENE.**

**C. A. SHORE, M.D., DIRECTOR.**

The work of the State Laboratory of Hygiene divides itself into three divisions or lines of work: The examination of specimens, the distribution of diphtheria antitoxin, and the treatment of patients with prophylactic anti-rabic virus.

The total number of specimens examined was 12,731, as follows:

	<i>Positive.</i>	<i>Negative.</i>
1,091 sputum .....	236	855
660 diphtheria .....	239	421
790 Widal .....	299	491
298 rabies .....	154	144
196 malaria .....	26	171
78 gonococci .....	36	42
83 urine .....		
39 pathology .....		
28 miscellaneous .....		
7,285 feces .....	1,849	5,436
Hookworm .....	1,303	
Ascaris .....	402	
Hymenolepsis .....	172	
Strongyloides .....	32	
Trichocephalus .....	11	
Oxyuris .....	8	
Taenia saginata .....	3	
Balantidium .....	2	
2,183 water.		

The figures show a considerable decrease in number of hookworm examinations, a few less specimens of water, and a general increase in all other specimens. The Hookworm Commission does more and more of its work in the various counties and during the past year sent very few specimens to the Laboratory and most of the 7,285 specimens examined were sent directly by patient or physician and not by the employees of the Hookworm Commission. Until recently one or more microscopists paid by the Hookworm Commission was constantly at work in the Laboratory, but such is not now the case. If we eliminate the specimens sent by the Hookworm Commission and examined by their representatives, the apparent decrease disappears.

A general increase in the number of examinations of sputum, throat swabs, Widal tests and for malarial parasites and for gonococci show that there has been a very substantial increase in the amount of work done.

The analysis of water of all public supplies whether municipal or from the so-called mineral springs continues to show the wisdom of State supervision. The advertised claims of the therapeutic value of bottled waters are usually extravagant and often absurd, but we found several years ago that many waters on the market were not even clean. We are certainly unassailable in insisting that therapeutic waters should at least be clean and free from

intestinal bacteria. It was necessary to publish the names of several which were almost constantly polluted, and such publication was found to be an effectual means of securing an improvement, not only in the worst waters, but in all. The improvement has really been very marked. Practically all of the bottled waters, except possibly a few of local distribution only, can now be drunk with assurance of cleanliness. This was far from being the case several years ago.

The classification of our water analyses, shows as in former years, that the open top bucket well is many more times apt to be polluted as a bored well with pump. We have preached the uncleanliness of the bucket well by letter and by newspaper in season and out, but the harvest is still truly plenteous.

	Question-			
	Good.	Bad.	able.	Total.
Pump wells .....	237	99	53	289
Bucket wells .....	67	231	50	348
Wells, not known as to whether pro- vided with bucket or pump.....	20	31	11	62
Springs, private .....	30	51	14	95
Springs, mineral .....	241	27	23	291
City supplies .....	729	53	136	918
Streams and unknown sources.....	15	34	7	56
Cisterns .....	11	3	1	15
Artesian wells—flowing .....	9	...	...	9
	—	—	—	—
	1,359	529	295	2,183

There is at present a well marked increase in rabies in the State. For several years after the antirabic work was taken up by the State Laboratory of Hygiene the number of animals dying with the disease and the number of persons bitten by rabid animals remained at almost a fixed figure. I believe this had been the case for some years though there is insufficient data on the subject. During the last eighteen months there has been an increase shown in the figures of each month. In the year ending May 31st we examined 298 animals and found 154 of these rabid: Dogs, 138; cats, 12; cattle, 3; and one child. The corresponding totals of the year before were 199 examined and 117 rabid. There has been at the same time an increase in applications for treatment by victims of these animals. In the year just passed 259 were treated, against 195 the year before. We have now treated nearly 900 persons in all and so far have had no fatalities. There was one death from rabies in the State during the past year. This person had had no treatment. The economic loss to the State caused by dogs is appalling and all of it is preventable. Rabies is the one disease that could be abolished by legislative enactment. A law prohibiting the running at large of dogs would stamp it out in two years, except the cases coming over the border from neighboring states. But I think it probable that if we enacted such a law as suggested our superior civilization would be emulated by our neighbors.

The third line of work shows that we have distributed

1514	1,000-units
1,107	3,000-units
1,632	5,000-units
<hr/>	
	4,253

diphtheria antitoxin at the reduced contract price, saving to the State the sum of \$21,579.55.

We hope to take up at once the manufacture of typhoid vaccine. We intend to distribute this at cost which we believe will be very small. It is not a wild dream to hope that our State will soon be as immune to typhoid fever as it now is to smallpox.

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ANNUAL REPORT OF ASSISTANT SECRETARY TO BOARD FOR HOOK-WORM DISEASE.

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JNO. A. FERRELL, M.D., ASSISTANT SECRETARY.

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*Mr. President and Gentlemen:*

It gives me pleasure and honor to act as spokesman for the six doctors, eight microscopists and a clerk who have been making history for North Carolina in health work. A more zealous, effective and loyal team has nowhere waged warfare on disease. I wish every member of the force could be here and relate first hand some of their rich experiences in the heart of the eighty counties in which their activities have reached. When a county campaign closes, every man, woman and child, even in the remotest districts, knows the fundamental facts concerning hookworm disease, its cause, treatment and prevention. The dispensary educates the masses and the classes by the demonstrative method of teaching. Living examples of the striking results effected by treatment are left in every community as constant reminders that curing the disease drives away sickness and poverty and brings in its stead health, energy, happiness and prosperity.

Of the one hundred counties in the State eighty have made appropriations for the first round of dispensary campaigns and eight have provided for a second campaign. However, for the figures to be given in this report only the results obtained up to April 1st when the last regular quarterly report was compiled will be considered. At that time seventy-four counties had made the first appropriation, and five the second appropriation. A total of \$19,900.59 had been rendered available, an average of \$252 for each county. The work had been finished in sixty-five counties at an average cost of \$211.55 or 84 per cent of the available funds. The average length of the campaigns has been 5.8 weeks. The dispensary treated cases have cost the counties on the average 17.5 cents. By including those treated by general practitioners without cost to the counties, the amount is reduced to 14 cents. During 1912 we spent for all agencies a total of \$32,636.92 and recorded 57,991 persons treated at an average cost of 56 cents each. The Commission paid 59 per cent of the expenditures and 41 per cent was paid by the State and counties. The amounts were distributed as follows:

Commission .....	\$19,245.56, or a cost of 33½ cents per case.
State .....	5,036.45, or a cost of 8.6 cents per case.
Counties .....	8,354.91, or a cost of 14.4 cents per case.
Total .....	\$32,636.92, or a cost of 56.1 cents per case.

The last Legislature increased the appropriation for the campaign so that with the increase being made by the counties I think we can confidently say that North Carolina is meeting the Commission half way in advancing the fight for the eradication of the disease and the improvement of sanitary conditions.

The personnel of the district directors has undergone some changes during the past year. Drs. C. L. Pridgen, P. W. Covington and G. F. Leonard are still in the service. Drs. C. F. Strosnider and T. E. Hughes resigned the past spring to enter general practice. Their places have been filled by Drs. H. L. Sloan and B. E. Washburn. Dr. W. P. Jacocks joined the service last August. Each physician shoulders the responsibility of selecting his assistant. The doctor is held accountable for results. A weekly summary is made up in the central office and the doctor doing the largest work heads the list. No member of the force cares to be a "tail-end" very long. The stability and competency of these men is attested by the fact that in no quarterly or annual report sent out by the Commission has North Carolina failed to head the list in the comparative count with the twelve Southern States engaged in the campaign.

The physicians of the State have shown a magnanimous spirit throughout the entire campaign. They have coöperated with us in securing county appropriations, sent patients into the dispensaries, and distributed a large quantity of literature. Up to April 1st approximately three-fourths, or 1,400 of them have made reports of their treated cases which number 44,354 persons.

The public school forces have consistently figured in the work. From the able State Superintendent down the list including the county superintendent and the timid first-term girl teacher, their work has been courageous, tireless and effective.

Two incidental features of the work have been the making of preliminary infection and sanitary surveys by counties. The infection survey is based upon the examination of a minimum of two hundred rural children ages six and eighteen years inclusive. Such surveys are complete for sixty-four counties in each of which on the average 978 children were examined, or a total of 62,338 children of whom 28,852 or 46 per cent were found infected. The sanitary survey is based upon the sanitary inspection of a minimum of one hundred farm homes in a county. These surveys have been made for seventy-four counties averaging 394 homes to the county. Of the 29,170 farm homes inspected 15,436 or 52 per cent have no kind of a privy.

The full results of the three years campaign cannot be accurately determined. Indirectly it has meant considerable in creating a broader and deeper interest in general health work. Directly it has provided treatment for 122,655 infected persons who have been benefited in health and helped to a better scale of living, at the average cost of 56 cents for each person. Of these 44,354 persons were treated by private physicians and 78,302 by members of our staff. The number of microscopic examinations made rather than

the number of treated persons affords the best index to the growth of the work. However, the growth in both has been rapid and significant as the following figures will indicate:

	1910	1911	1912
Microscopic examinations .....	7,949	37,328	135,867
Persons treated .....	8,000	45,881	57,991

In many counties more than one-third of the entire population has been examined and it is not unusual to examine every fifth person. In fact, we have already examined 216,616 persons or practically every tenth inhabitant in the entire State and approximately every twentieth person has been treated. About one-half of the campaign expenses are now paid by the State and the counties.

The work accomplished stands as the best evidence that every organized agency has been active in rendering assistance. The doctors, teachers, editors, influential farmers, business men, bankers and their wives have taken a hand in the work. County commissioners have heard the appeal for those in need and rendered possible this grand free work. The story for North Carolina is in a general way the story for each of the twelve Southern States which are carrying on this work. Already we can see that this manifestation of interest in the eradication of a single disease is but a beginning of a great health wave destined to sweep over the South and leave it a clean and healthful Eden, a prosperous and attractive region in which to live.

#### Adoption of reports of Dr. Rankin, Dr. Ferrell and Dr. Shore.

DR. W. S. RANKIN: The State law in regard to the personnel of the State Board of Health has this to say (section 1, chapter 62): The Medical Society of the State of North Carolina shall choose from its members by ballot four members and the Governor of the State shall appoint five other persons (one of whom shall be sanitary engineer), and they shall constitute the North Carolina Board of Health.

Section 2, chapter 62, says that "The members of the Board of Health elected by the State Medical Society shall be chosen to serve for six years. Their term of office shall begin immediately upon the expiration of the meeting at which they were elected. Those appointed by the Governor shall serve for six years, their term of office beginning with the first regular meeting of the Board after their appointment."

Section 7 of the same chapter says: "The meetings of the State Board of Health for the election of officers shall be on the second day of the annual meeting of the Medical Society of the State of North Carolina in the year 1901 and every six years thereafter."

There are now two vacancies existing on the State Board of Health, the vacancy made by the retirement of Dr. Ashcraft, and the vacancy caused by the retirement of Dr. Tayloe.

DR. L. B. McBRAYER: At the election two years ago we had considerable confusion from the fact that we voted to fill two vacancies at once. To prevent any trouble and to expedite business I move that we fill the vacancies one at a time.

Motion seconded by Dr. Richard H. Lewis and carried.

DR. J. HOWELL WAY: Nominations are now in order to fill the vacancy caused by the expiration of the term of Dr. Ashcraft.

Dr. J. E. Ashcraft nominated by Dr. R. L. Gibbon, Charlotte.

Dr. I. W. Faison nominated by Dr. E. Reid Russell; seconded by Dr. A. J. Crowell, Charlotte.

Dr. Oscar McMullan nominated by Dr. John T. Burrus, High Point; seconded by Dr. W. C. Gallaway, Wilmington.

Dr. A. A. Kent of Lenoir, nominated by Dr. J. T. J. Battle, Greensboro; seconded by Dr. Richard H. Lewis and Dr. L. B. McBrayer.

Dr. Oscar McMullan's name withdrawn from nomination and placed in nomination to fill the place held by Dr. Tayloe.

Dr. Way announces the ballot—Ashcraft, 14; Faison, 38; Kent, 88.

Dr. A. A. Kent of Lenoir having received a majority of the votes cast is elected to fill the vacancy caused by the retirement of Dr. Ashcraft.

DR. WAY, President: Nominations are now in order to fill the vacancy caused by the expiration of the term of Dr. David T. Tayloe.

Dr. Oscar McMullan nominated by Dr. John T. Burrus, High Point; seconded by Dr. R. H. Lewis.

Dr. Cyrus Thompson nominated by Dr. Albert Anderson, Raleigh; seconded by Dr. H. D. Stewart of Monroe, and Dr. G. T. Sikes of Grissom.

Ballot—McMullan, 56; Thompson, 80. Dr. Thompson elected.

DR. WAY: I announce to the members of the State Medical Society and the State Board of Health the election of Dr. A. A. Kent of Lenoir, as a member of the State Board of Health for a term of six years to fill the vacancy caused by the retirement of Dr. J. E. Ashcraft of Monroe; and the election for a like term of Dr. Cyrus Thompson of Jacksonville, to fill the vacancy caused by the retirement of Dr. David T. Tayloe of Washington.

I also announce to you gentlemen of the conjoint session the appointment recently made by Governor Locke Craig of Dr. Richard H. Lewis of Raleigh, to succeed himself as a member of the State Board of Health for a term of six years, and in addition the Governor's designation for a like term of service on the Board of Dr. Edward J. Wood of Wilmington, succeeding to the vacancy occasioned by the expiration of the term of Dr. E. C. Register of Charlotte.

DR. W. S. RANKIN: There are two citizens of North Carolina who have done work in which this Society is deeply interested, who have been active in working for all health measures. These gentlemen are Hon. John M. Faison and Hon. Edward W. Pou, who have been active in the National Congress, and I think it would be a graceful act to give these men a vote of thanks for their activity in behalf of public health. I move that we extend a vote of thanks to these gentlemen.

Motion seconded by Dr. G. T. Sikes and Dr. W. C. Whitfield. Carried.

DR. A. A. KENT: Fellow members of the North Carolina Medical Society, you must well know that I have no speech to make to you on this occasion, because the thought of being elected a member of the State Board of Health was absolutely foreign to my mind until this morning. I had no idea that anyone had me in mind for that position, so I have no speech of thanks prepared. But I do want to say that I thank you from the bottom of my heart for the evidence of confidence in me as shown by the vote given me this morning, and I pledge you

that in my service on the State Board of Health North Carolina shall have the best that is in me. That is all I have to say.

DR. CYRUS THOMPSON: Mr. President, and members of the State Medical Society, I am indeed in a very unusual condition. Ordinarily I am not averse to talking and yet there come times when a man does not know what to say. It is said that a fall from a housetop does not hurt a man at all; the hurt is caused by the sudden stop. This honor is very sudden to me; and while it does not hurt me, like the Irishman's stop, from the housetop, it well nigh knocks me "spaichless."

I came here with no more expectation that the Society would bestow this honor upon me than I have of going to heaven before I die. But man, and especially a doctor, lives frequently in a condition of uncertainty, and I must not complain. Indeed, during the lives of our patients, our dead certainties are few. And sometimes the doctor does not know what will happen or where he is going. I was down the railroad on a call one day and drove out into the country from the station. Coming on back to meet the train, the weather was hot, the sand was deep, and the mule was slow. I saw in calling distance a log train going by, and, fearing I would miss my train, I got the engineer to take me on his "loky." I remember it with the distinctness of a vision. As we went rumbling and creaking up hill and down hill and over ravines and tottering trestles, the log cars came in winding pursuit of us like bundles of huge, scaly serpents. The ride was what a nervous man would have called fierce. The engineer, seeing that I was enjoying in serious silence the serenity of an intense and uncertain calm, asked me where I was going. I said, "I don't know; I am going to Heaven or Folkestone—I don't know which."

Mr. President, I never bother myself much about where I am going or what is to become of me. I take the thing quietly. The philosophy of an equable and happy life, the real helpful life withal, lies in the right use of the everlasting NOW. Dr. Osler said recently to the Yale students the wisest thing ever said for the happiness of mortal man. He said, "Every man can carry the burdens of today, but no man can take the burdens of yesterday and the burdens of tomorrow and carry them along with the burdens of today." This is but a new rendering of the Scriptural quotation, "Take therefore no thought for the morrow; for the morrow shall take thought for the things of itself. Sufficient unto the day is the evil thereof." And sufficient also should be our joys.

If I had been defeated, I should have this same equanimity, the more especially so if I had been defeated by my friend, Oscar McMullan. In that event I should have had no sort of regrets. For many years he has been my friend and I take him as one of my precious own, and know for a certainty that he is one of God's elect.

This thing satisfies me some. Mr. President, I want to say that I thank all of you sincerely for this honor out of the bottom of my heart. I had no expectation of it, as I have said; but if there was any gift the Society would give me, this is the only one I could have desired. I have no desire ever to be your Secretary or your President; but I do desire, whether in public office or as a private individual, to advance the welfare of all the people of the State of North Carolina, and to teach the

folks health and to build up the one greatest asset of any nation. I have never done less than my very best in any position in which I have been put. I desire to be serviceable in the world. So I thank you one and all, and pledge you my very best service in this new work.

DR. WAY: Is there no other business to come before this conjoint session of the State Medical Society and the State Board of Health? If not I declare this meeting adjourned.

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#### Minutes of Called Meeting of the State Board of Health

RALEIGH, N. C., September 23, 1913. 11 A. M.

The members present were President J. Howell Way, Doctors Anderson, Laughinghouse, Spencer, Thompson, Col. J. L. Ludlow, and Dr. J. R. Gordon and Mr. Henry Page.

The President asked the Secretary to state the purpose of the meeting. The Secretary stated that the object of the meeting was to consider a proposition, from a committee composed of Mr. Henry Page, Doctors J. R. Gordon and W. S. Rankin, representing the Board of Directors of the North Carolina Sanatorium for the Treatment of Tuberculosis, that the State Board of Health accept, partially or wholly, the future management of the State Sanatorium for the Treatment of Tuberculosis; and, if the State Board of Health should be favorable to the proposition, to approve a proposed bill, transferring the management of the Sanatorium to the State Board of Health. The President asked the Secretary to read the proposed legislation. Dr. Rankin read the proposed bill.

The meeting then adjourned in order that the members of the committee representing the directors of the Sanatorium might thoroughly examine the bill before submitting it for final consideration to the State Board of Health.

#### MEETING CONTINUED, 2 P. M.

The meeting was called to order by the President. Dr. Gordon, representing the Committee of the Board of Directors of the Sanatorium, then described the present plant. He stated that it was admirably located on a tract of thirteen hundred acres of land which cost somewhere between \$7,000 and \$8,000. The buildings, when those under construction are completed, will have cost about \$55,000. Dr. Gordon stated that the total appropriation for maintenance amounted to \$20,000 a year.

Dr. Gordon approved the bill submitted to the Board in its forenoon session. He stated that in his opinion there would be little opposition to its passage.

Dr. Gordon was asked a number of questions as to the capacity of the Institution for patients, as to the per capita cost of taking care of patients, and other questions pertaining to the future management of the Institution, all of which he answered to the satisfaction of those present.

Mr. Page stated that he thought the proposed bill would meet the needs of the situation, and that the proposed legislation would meet

very little opposition. He further stated that the land on which the Institution is located, and for which about \$7,500 was paid, would sell for \$20,000 today.

Dr. Rankin then discussed the resources of the Institution, and stated that he thought that the State Board of Health could manage the Institution on its present appropriation with a \$1 per day per capita charge. He recommended the approval of the proposed legislation and the acceptance of the Institution. Dr. Spencer moved that the recommendation of the Secretary be approved and the management of the Institution accepted by the State Board of Health provided the General Assembly saw fit to enact the bill. After considerable discussion of this motion, all of which was favorable to the acceptance of the management of the Sanatorium, the motion was unanimously carried.

The President then asked the Secretary to submit any other business that should come before the Board. The Secretary stated that Hon. Martin L. Willard, Chairman of the Board of County Commissioners of New Hanover County, had officially requested a hearing before the State Board of Health, but that owing to an oversight on the part of the Secretary, Mr. Willard had not been notified in time to be present at this meeting.

Mr. Willard desired to come before the Board of Health to ask that the Board send a committee to Wilmington to investigate the work of the Board of Health of the city of Wilmington and county of New Hanover, for the purpose of giving an official opinion as to the wisdom and efficiency of the local board in their policies and methods. Dr. Rankin further stated that he thought it would be unwise for the Secretary to go to Wilmington to pass upon the official work of the local board; that the establishment of such a precedent would make it necessary for him to sit in judgment on the work of any county board of health or municipal board of health whenever any faction in a county or town desired to bring charges against the local board of health. It was moved and carried that the Secretary should not investigate the work of the New Hanover Board of Health with a view of expressing an official opinion upon it.

Dr. Rankin then stated that a point had been reached in the organization of state health work where it was necessary to have a differentiation of labor. The work of the office had been divided, therefore, into bureaus, and, with the approval of the Board, a Chief of each Bureau, to be responsible for the management of the Bureau, had been appointed. A Bureau of Vital Statistics, a Bureau of County Health Work, a Bureau of Education and Engineering, a Bureau of Hookworm Eradication, and, if the proposed legislation which has just been endorsed is enacted in the law, a Bureau of Tuberculosis will be established.

These bureaus are all separate and distinct from one another and only related with each other through the executive office of the Board of Health. A general ruling with reference to one bureau chief must hold for all others. Harmony among the staff of the Board of Health will not obtain with discriminatory rules by either the Board or its executive officer with respect to the work of the bureau chiefs. Before this reorganization there had been some little friction between the Executive

Department and one of the divisions of the work of the Board, and this friction was due to the absence of a clear and definite understanding of the relation of the executive office to the other departments of the Board of Health. In the future it will be necessary for the various bureaus to understand their relation to each other, and that the executive officer of the Board, as provided in the State law, has and must have, if this work is to continue harmoniously, absolute jurisdiction over the various bureaus. This position of the Secretary was heartily endorsed by the Board.

There being no further business before the Board, the meeting adjourned.  
W. S. RANKIN, *Secretary.*

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#### Minutes of Called Meeting of the State Board of Health

MONTROSE, N. C., October 23, 1913. 8 P. M.

The members present were President Way, Drs. Anderson and Spencer. The President asked the Secretary to state the purpose of the meeting. The Secretary stated that the Board had been called together for the purpose of making arrangements for complying with the recent act of the General Assembly which placed the management of the State Sanatorium under the State Board of Health; that it would be necessary to elect the officers of the Institution and make all arrangements necessary for the opening of the Sanatorium at as early a date as possible.

The President then asked the Secretary if he had any applications for the position of medical director. The Secretary stated that there were two applicants, both very fine men with splendid training and the best of recommendations. The Secretary further stated that one of the applicants, Dr. Wilson Pendleton, had been in sanatorium work for three years, that he came with the very highest recommendations that any one could have, and that, without reflecting at all upon the other applicant, who was also a well qualified man, he desired to recommend that the Board elect Dr. Pendleton. The Secretary asked that the Board hear some of the letters in regard to Dr. Pendleton. Dr. Rankin then read a number of letters recommending Dr. Pendleton for the position of Medical Director of the Institution. Dr. Spencer moved that Dr. Pendleton be elected at a salary of \$2,000 a year. This motion was unanimously carried.

Dr. Spencer then moved that the President, the Medical Director and the Secretary of the State Board of Health prepare the necessary rules and regulations for the government of the Institution. This motion was likewise unanimously carried.

Dr. Anderson moved that the Board of Internal Improvements be asked to send their auditor to the Sanatorium at their earliest convenience to audit the accounts of the Institution and make an official statement of the conditions prevailing in the Institution from an economic and efficiency standpoint at the time that the State Board of Health assumed the responsibility for its management.

The matter of electing a business manager was then taken up. The Secretary recommended Mr. Tyre Glenn for the position. He further stated that Mr. Glenn had made an efficient manager for the past two years and there was no reason for discontinuing him in office and many reasons for retaining him. Mr. Glenn was then elected business manager at a salary of \$1,200 per year.

Dr. Pendleton was asked to give his opinion of the plant as compared with other sanatoria. Dr. Pendleton expressed himself as delighted with the location of the Sanatorium and with the construction of the buildings. He expressed some disappointment that the buildings were so far apart as to necessitate a duplication of heating plants for the kitchen and dining-room.

The President of the Board requested the Secretary to take up the matter of locating a weather gauge at Montrose with Senator Overman and Representative R. N. Page.

The Board also suggested that provision be made for entertaining the patients and making sanatorium life more attractive. To this end it was suggested that a pavilion be equipped with suitable literature and games for consumptive patients, and that games like croquet and other games that consumptive patients might engage in be provided on the ground. The meeting then adjourned.

W. S. RANKIN, *Secretary.*

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#### Minutes of Called Meeting of the State Board of Health

MONTROSE, N. C., February 17, 1914,

The members present were President Way and Doctors Anderson, Laughinghouse and Wood.

The President asked the Secretary to relate the circumstances leading up to the resignation of Dr. Pendleton. After this was done, the Secretary was asked if he had any recommendation for the Board to consider. The Secretary suggested that the Board authorize him to arrange with Dr. Paul P. McCain of Gaylord Farm Sanatorium, Wallingford, Connecticut, for a meeting in Baltimore, and after conference with Dr. McCain, to offer the Doctor from \$1,500 to \$2,000 a year for his services as Medical Director of the Sanatorium. The Secretary further suggested that the Board authorize him to interview Dr. L. B. McBrayer of Asheville, for the purpose of ascertaining whether or not it would be possible to secure Dr. McBrayer's services for the supervision and general direction of the tuberculosis policy of the Board. A motion to give the Secretary the above authority was unanimously passed.

After discussing in an informal way the work of the Board, the meeting adjourned.

W. S. RANKIN, *Secretary.*

**Meeting of Executive Committee of the State Board of Health**

RALEIGH, N. C., May 19, 1914.

The members of the Executive Committee present were Dr. R. H. Lewis and Col. J. L. Ludlow. Dr. L. B. McBrayer, Superintendent of the State Sanatorium, was also present at this meeting.

Dr. Lewis asked Colonel Ludlow to act as chairman of the meeting in the absence of President Way, and after calling the meeting together Colonel Ludlow read the following letter:

WEST RALEIGH, N. C., May 19, 1914.

*Chairman Executive Committee, State Board of Health, Raleigh, N. C.*

DEAR SIR:—A letter from your Secretary informs me that the Executive Committee will today be notified that my services will not be needed by the Board on and after June 1st.

Presuming that your Committee will act upon Dr. Rankin's suggestion, I wish to call to your attention the fact that one month's notice is due me from June 1st. Further, the Board owes me salary for six weeks vacation—two weeks for three years. Your Secretary has ruled that the employees of the Board should be allowed two weeks annual vacation, on salary; which ruling has been conformed with. For the past three years there has been no opportunity for me to leave the office for a vacation.

Should the presence of my representative, Mr. Halstead, of the firm of Goodno & Bernard, before the Committee be desired or should it be deemed advisable for me to appear before the Committee, a call over telephone No. 976-M will receive immediate attention.

Yours truly,

MABEL MASSEY.

Following the reading of the above letter, Dr. Rankin stated that he had no further use for the services of Miss Massey at the office; that Miss Massey's services were unsatisfactory from a quantitative rather than a qualitative standpoint; that she had been keeping books in the office for the last ten years, but the condition of the books was not satisfactory to him, and if the Committee desired to see the books, he had brought them to the meeting for the Committee's examination in order that the books might speak for themselves.

Dr. Rankin stated that on May 6th he told Miss Massey that on account of the meeting of the Executive Committee during the following week, and on account of a probable visit from Mr. Julius Cone of Greensboro, for the purpose of investigating the Sanatorium and its business management, the books would have to be posted and brought up to date and put in good shape, and that as he was unwilling to take chances in leaving this to her, that he wanted her to turn over all the books and records pertaining to the accounts to him on the afternoon of the above day so that he might refer the books to Mr. Brown, of the office, to be put in the proper shape. Dr. Rankin further stated that before taking this action he had called in, as his private adviser as to the condition of his books, Mr. E. B. Earnshaw, bursar of Wake Forest College. Dr. Rankin further stated that Miss Massey upon being told to turn over her books seemed to think that she was responsible for the

books, and for that reason he put in writing what he had said to Miss Massey, in the form of the following letter:

RALEIGH, N. C., May 6, 1914.

MISS MABEL MASSEY, *Clerk,*  
*State Board of Health, Raleigh, N. C.*

DEAR MISS MASSEY:—In order that there may be no misunderstandings or questions as to the responsibility in alterations of the accounting system of this office, you are hereby directed to turn over all books and records pertaining to the accounts of the Board to my agent, Mr. T. Peyton Brown, in order that he may post the books preparatory to a meeting of the Executive Committee of the Board of Health.

I have authorized the Merchants Bank to recognize the signature of Miss Mary Robinson on checks attached to approved vouchers. I am also authorizing Miss Robinson and Miss Reynolds to open and distribute the mail.

I have notified President Way of the Board to call a meeting of the Executive Committee some time after Tuesday, and I will notify you of the exact date of that meeting as soon as I hear from the President.

Very truly yours,                           W. S. RANKIN,  
*Secretary.*

Dr. Rankin stated that on going to the office that night to see Mr. Brown and Miss Robinson begin the posting of the books, that it was found that the cash journal, the book of original entry, had disappeared. After locating Miss Massey over telephone, she stated that this book was at home on her desk. Miss Massey was informed that a messenger would be sent to her home at ten o'clock that night, about the time that it was supposed that she would return, to get the cash journal and all other records belonging to the office. When the messenger was sent, he returned with the following letter from Miss Massey:

WEST RALEIGH, N. C., May 6, 1914.

DR. W. S. RANKIN, *Raleigh, N. C.*

DEAR DR. RANKIN:—Having advised with an accountant I find that there is a legal question as to whether I can give up the records for which I am responsible until the same are audited. This audit will be made immediately. The entire question will be placed in the hands of an attorney tomorrow.

Very truly yours,                           MABEL MASSEY,  
*Chief, Bureau of Accounting.*

Following the receipt of this letter, I requested the Attorney-General to see that the office records were replaced. Before the Attorney-General could get in touch with Miss Massey, about twelve o'clock on the day following the date of the above letter the books were sent to the office.

Dr. Rankin stated that he had no charges to bring against Miss Massey except to say that her services to him were unsatisfactory, and he thought that was sufficient. He also placed before the Committee the following letter written the day preceding the meeting of the Executive Committee:

RALEIGH, N. C., May 18, 1914.

**MISS MABEL MASSEY, 10 Maiden Lane, West Raleigh, N. C.**

DEAR MISS MASSEY:—The Executive Committee of the State Board of Health meets in my office tomorrow morning at nine o'clock.

I shall notify the Executive Committee that after this month your services in the office will not be needed further. My reason for this is that I prefer to handle my books with my own stenographer, and, second, that I can save from \$25 to \$50 per month by the rearrangement of the work.

Dr. Lewis expressed himself as unwilling to turn over the bookkeeping to Mr. Brown. Dr. Rankin stated that Mr. Brown was simply preparing the books and posting them, and that he, Dr. Rankin, proposed to keep the books himself with the assistance of his stenographer and clerk, and that this could be done more economically than the book-keeping had been managed in the past.

Dr. Rankin further stated that the bookkeeping was becoming quite an item in the management of the office, and that if it was possible to do so he would be very glad to give up his office as treasurer and simply retain the position as executive officer of the Board, but that the divorce-  
ment of the bookkeeping from the executive work would probably not be a wise thing to do.

Dr. Lewis suggested that it might be a good thing to get a first-class bookkeeper to economize the time of the Secretary. Dr. Lewis stated that on account of Miss Massey's long connection with the work of the Board, he regretted that her separation from the Board work had not occurred under more agreeable circumstances to herself and to the Executive Officer; that he thought she ought to have been given an opportunity to resign.

Dr. Rankin stated that he had been governed with respect to Miss Massey quite a bit by the sentiment for a number of years, and that while he had no personal feeling against Miss Massey, that he did not want her any longer under his direction.

Dr. Lewis suggested that Miss Massey's request to give her a month's notice before accepting her resignation, and to pay her for the six weeks vacation which she claimed, be granted. Dr. Rankin suggested that he write Miss Massey that her resignation would take effect July 1st. He further stated that he was not willing to allow any personal considerations or prejudices to warp his judgment in this matter, but that he was acting out of respect for her long service to the Board. Colonel Ludlow asked if Miss Massey had been working in the office up to the time of the meeting of the Executive Committee. Dr. Rankin informed Colonel Ludlow that she had been out of the office since the sixth of May; that he did not want her in the office because he thought he could get along better without her than with her.

Upon this information Colonel Ludlow stated that if we accepted her resignation to take effect the first of July, she would be getting two months salary beyond her period of service. Colonel Ludlow thought

that the Secretary ought to be asked to secure Miss Massey's resignation to take effect June 30th.

Dr. Lewis stated that if she was entitled to vacations and had not received them, she should be paid for them. Colonel Ludlow suggested that the matter of compensation for the vacations that Miss Massey claimed that she had missed be left over to the full meeting of the Board in June. After much discussion as to whether Miss Massey should be paid for the vacations claimed, it was agreed to leave to the full meeting of the Board the question of paying Miss Massey for six weeks vacation which she claimed to be due her.

Dr. McBrayer then made the following statement: What I have to say about the Sanatorium is that we are a little short of money. Ever since the State Board of Health has had charge of the Sanatorium, Dr. Rankin has been trying to get the business manager, Mr. Glenn, to let him know what the liabilities are, but he has been unable to find out. When I came on the scene, Dr. Rankin thought we had \$9,000 in the permanent improvement fund for building and equipment, and that we were even on our appropriation for maintenance and support, which gives us \$1,666.66 a month. When I took charge, I asked Mr. Glenn what it was costing to run the Institution. We could not find out, because he had been paying old debts and charging them in with the current expenses each month. He himself could not tell what it was costing to run the Institution. I saw that things were not just right, so I asked him not to pay any more back bills at all. Notwithstanding that, his books show that on the 29th of April he paid out \$3,049 on old debts. Since then I have been trying to go into the thing, and Mr. Brown has been working on it. So far as the cash is concerned, it is all right to a cent. But he has overdrawn the appropriations for running expenses so that we have only \$3,000 instead of \$10,000 left. He used part of the money to pay old debts.

We have \$3,000 left yet, it seems, in the construction and equipment fund, making, all told, something over \$6,000. Now, according to his report, we had only a little over \$1,000 in the construction fund and he told me that we had \$8,000 in the maintenance fund. I thought we ought to get along on that. I have been trying to get him to submit a statement of the liabilities, but he was always sick. He has angina pectoris and is afraid to work. He postponed it from day to day. He agreed to come to this meeting, but has gone to Greensboro. He is the only man who knows what we owe, if he knows. It developed yesterday that he had given a note to the Bank of Aberdeen as business manager of the Sanatorium. It was in part payment of an account with a grocery company in Aberdeen, the owner of which has an interest in the bank. That note is due. We owe \$900 more to that company on open account.

We have been going over these things for two purposes: to find out what we have to run on from now until the first of December, and to conceive some way of running on it. We wanted to take the Executive Committee into our confidence and do something that would meet with their approval. Colonel Ludlow suggests that we go on until the meeting of the Board of Health next month, which we could do without any trouble, and then that we convert, if possible, the amount to our credit

on construction and equipment into such equipment as will enable us to run until the Legislature meets, and see if we cannot pull through in that way. We have at this time sixty patients, and I think fifty are paying.

The new building is partly finished. We have no place to take care of more than a day's supply of meat, butter, etc. We have some old refrigerators, but they are not of much account, and it costs \$450 a year to keep them supplied with ice. The probabilities are that in the winter the plumbing will freeze up and burst. What I had hoped to do was to put in some windows where they are needed in the basement, and get a place to store something. Probably we can nail up the openings with boards, if we can find the boards or get money to buy some lumber, and that will help some. By bricking up under the kitchen and dining-room we could keep those pipes from freezing, but that is evidently out of the question entirely. I have been trying to find out what we could do, and do it. When I thought that we had \$9,000 for construction, I thought we could get some cold storage and some electric lights and a little telephone system, so that we would not lose six hours a day going around to find some one. Now we find that it is impossible to do any of those things. If the pipes burst next winter, we shall have to let them burst. We haven't any money even to buy coverings for them.

It takes about \$1,250 a month to pay salaries. That includes the farm, dairy, truck garden and service. We can run through on that.

DR. LEWIS: How about the feed bill?

DR. McBRAYER: That is heavy. We have to buy everything the cows and horses eat, but we can't cut expenses much on that. We have a good dairy. Each patient gets a third of a gallon of milk a day. I estimate that we can take care of probably fifteen or twenty more patients with the milk we are getting. We expect to cut some oats pretty soon for green feed, if it will ever rain. Then we will get some green corn, and in October we will cut the ensilage corn and start on that. The dairy is in the best shape of anything in the Institution.

DR. LEWIS: The main thing is to devise some kind of legerdemain to take the construction fund for maintenance.

COLONEL LUDLOW: That is the only way out, unless we can borrow some money.

DR. McBRAYER: Even if we can do that, we will have to borrow money or contract some debts. In the meantime, before the Board meets, I can find out what it will cost us to run and what we owe.

DR. LEWIS: The salvation of the Institution before this has been that Dr. Gordon was treasurer of the Board of Trustees and was a member of the Legislature.

DR. RANKIN: He is still carrying a good deal of responsibility, and I do not intend to let him get out from under it.

DR. McBRAYER: We shall have rough sledding until the Legislature meets, but I think we have reached rock bottom now and know what we have to build on. Mr. Glenn has absolutely refused to tell us anything, but I think we know practically all the facts now. I made a pretty big sacrifice to go down there, but I think there is greater work to be done in tuberculosis in this State than in almost anything else, and that it is perhaps the greatest field of usefulness a man has ever had in the

State. I must say that if I had known the facts as they are I would not have done it. Still I do not blame Dr. Rankin. He told me the best he knew, and he thought it was the truth. If we can pull this over until the Legislature meets, the Sanatorium will not be a failure. I want to do some things that will be of value to the State and to humanity along the line of tuberculosis, and I know I can do them if we get an opportunity. It is seven months until we can draw on our appropriation for next year. I wanted the Executive Committee to know everything and to know our plans. I want to issue a monthly report as soon as I can and mail a copy to each member of the State Board of Health, so as to keep them in touch with us. This statement of affairs was really all we had to bring up, and unless you wish to ask any questions, I will ask you to excuse me, as I want to leave on the four o'clock train.

There being no further business, the committee adjourned.

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#### Annual Meeting of the State Board of Health

RALEIGH, N. C., June 16, 1914. 9 A. M.

The members of the Board present were President Way and Doctors Anderson, Kent, Spencer, Thompson and Wood.

The President called the Board to order and asked the Secretary to state the object of the meeting. The Secretary stated that there was a delegation from Morehead City that wished to be heard by the Board and as this delegation was waiting it would probably be best to give them an immediate hearing. The President announced that the Board would be very glad to hear from the delegation.

Dr. K. P. B. Bonner stated that he was present with Mr. Foster, who was proprietor of the Atlantic Hotel, at Morehead City; that as a result of the publicity given the sanitary conditions at Morehead City by the Board it seemed that Mr. Foster would suffer heavily in his hotel business and that Mr. Foster desired to point out to the Board the embarrassment of his present position and to consider with the Board the feasibility of taking certain action that might be helpful to him. Dr. Rankin stated that Mr. Foster did not come before the Board in any feeling of resentment, but that Mr. Foster had shown a fine spirit throughout the controversy with Morehead City, and that Mr. Foster had done all within his power to adjust matters between the Board of Aldermen and the State Board of Health in order to avert the publication of the statement regarding the sanitation of Morehead City. Mr. Foster stated that the first intimation that he had of the complications existing between Morehead City and the Board of Health was but a short time ago, when he came to Raleigh and was told of the situation by a friend. He said that he at once took up the matter with the Board of Aldermen of Morehead City in order to adjust the situation, but he had found it impossible to handle the matter in such a way as to stave off the publication of the facts about the conditions. He called attention to the fact that whereas the city authorities were the ones criticized by the Board of Health, that he who could not control sanitary conditions of the city was the real sufferer. Mr. Foster stated that he had done all within his power to make his hotel sanitary and he believed

that it was sanitary. He stated that he used the public water supply of Morehead City, that he had what he regarded as a sanitary milk supply, that he had his own private sewer, and further intimated that he was willing to pasteurize his milk as this was suggested by the Board or to obtain his milk from the dairies at New Bern. He said that while he could not afford to screen the entire hotel, that he would be willing to screen the kitchen and dining room and that he would try to have any unsanitary closets near the hotel made sanitary or removed. Mr. Foster said he would like the Board to suggest just what measures he could adopt to make his hotel perfectly safe and then after an official inspection of his hotel to give him a letter which he could publish in the paper stating the sanitary condition of the hotel as found by inspectors of the Board of Health.

Dr. Rankin said he thought that Mr. Foster's request was a reasonable one and that he would be glad to see the Board of Health act upon it.

A resolution was finally carried appointing Mr. Warren H. Booker and Dr. Cyrus Thompson a committee to visit Morehead City to consult with and advise Mr. Foster as to the necessary changes to be made in and about the hotel.

The Secretary then called the attention of the President to a committee representing the whole time county health officers of the State who wished to be heard by the Board. Dr. Charles T. Nesbitt, as chairman of the committee, after a short discussion of the relation of the State Board of Health to the county boards of health and of the difficulties of county health work, introduced the following resolution as a proposed basis for future coöperative action on the part of the State Board of Health and the whole time county health officers:

First. That the Chief of the Bureau of County Health Work be named by the Full Time Health Officers' Association.

Second. That the Chief of Bureau of County Health Work shall be the representative of the Full Time County Health Officers' Association with the State Board of Health, and shall constitute the medium through which official intercourse between the health officers and the State Board of Health shall pass.

Third. That only such reports shall be submitted to the State Board of Health as shall be agreed upon by the Chief of the Bureau of County Health Work and the Full Time County Health Officers' Association.

Fourth. That no system involving competition between the various health officers, or comparison of their work, shall be given publication in any way.

Fifth. That the State Board of Health nor any of its officers shall interfere beyond the function of recommendations when requested, in the selection of local health officers in this State.

W.M. M. JONES, *Johnston County.*  
H. H. UTLEY, *Guilford County.*  
B. E. WASHBURN, *Nash County.*  
B. W. PAGE, *Robeson County.*  
E. F. STRICKLAND, *Forsyth County.*  
ARCH CHEATHAM, *Durham County.*  
D. E. SEVIER, *Buncombe County.*  
G. M. COOPER, *Sampson County.*  
CHAS. T. NESBITT, *New Hanover County.*

After introducing the resolution Dr. Nesbitt entered upon a rather detailed discussion of the different sections of the resolution. After some discussion of the resolution and Dr. Nesbitt's remarks, participated in by Doctors Thompson, Kent, Wood, Way and Rankin, the following resolution was adopted:

Whereas, the representatives of the Whole-time Health Officers of North Carolina have appeared before this Board tonight with suggestions looking to a closer amalgamation of the work of such local health officers and the county work of the State Board of Health, be it

*Resolved, first,* That we appreciate such suggestions as betokening a spirit of helpful coöperation which should be beneficial to the public health interest,

*Resolved, second,* That the Secretary of this Board is authorized to receive monthly reports of local county health work, filing and, when advisable, compiling the information therein contained for the betterment of our health work. The Secretary is also instructed to cordially coöperate with local county health officers, affording them every possible use of the facilities of this office.

The resignation of Dr. Richard H. Lewis as a member of the Board of Health was then presented, but the Board promptly declined to accept the resignation. Dr. Way then offered the following resolution, which was unanimously adopted by the Board and later by the conjoint session :

WHEREAS, the Medical Society of the State of North Carolina in its sixty-first regular annual session, assembled in Raleigh, N. C., June 16, 17 and 18, 1914, and the State Board of Health have learned with deep regret of the continued illness and confinement in his home in this city of our highly esteemed friend, loving brother and honored member, Dr. Richard H. Lewis, whose kindly presence, genial manner, wise counsel, continuous interest and untiring energy in each and all of the numerous official positions so efficiently filled by him at different times during the many years of his membership and service in the Society, be it

*Resolved,* That the Society and the State Board of Health do hereby extend to Dr. Lewis our assurances of affectionate regard and sympathetic interest, with the hope that he may soon be restored to health and permitted to resume the wonted activities incident to his busy and fruitful life, gratifying alike to his many friends and so valuable in character to our medical institutions and to the State at large.

(Signed) J. M. PARROTT,

*President Medical Society of North Carolina.*

J. HOWELL WAY,

*President State Board of Health of North Carolina.*

Committee:

J. T. J. BATTLE.

J. HOWELL WAY.

J. L. NICHOLSON.

T. E. ANDERSON.

A. A. KENT.

The Board adjourned to meet the following day.

ANNUAL MEETING OF THE STATE BOARD OF HEALTH.  
(CONTINUED.)

RALEIGH, N. C., June 17, 1914. 11 A. M.

The meeting was called to order by President Way.

The members of the Board present were Doctors Wood, Laughinghouse, Spencer, Thompson, and Colonel Ludlow.

The Secretary stated that he desired to bring before the Board in a brief way, omitting the rather lengthy reading of the minutes, the meeting of the Executive Committee held May 19, 1914. The Secretary stated that the Executive Committee had authorized him to accept the resignation of Miss Massey, former bookkeeper, and had left it open to him to adjust the date on which the resignation should take effect and the payment of balance on salary and the adjustment of the claim of Miss Massey for payment for vacations due her which she did not take. The Secretary stated that acting under this authority he had accepted Miss Massey's resignation to take effect June 20th, whereas her service with the Board had terminated May 6th, and had paid her her salary up to June 20, but had declined to allow her salary claimed for vacations that she did not take on the ground that the General Assembly had declined to authorize regular vacations for employees of the State Government and for the further reason that it would be very difficult to decide at what salary one should be paid for vacations that were not taken but claimed for several years back, during which time the compensation for services had varied. The Secretary stated that unless there was objection on the part of the Board he would send Miss Massey a check covering her services up to June 20th and notify her that her account with the State Board of Health was closed.

Colonel Ludlow moved that the action of the Secretary with reference to Miss Massey be approved. This motion was carried.

The next matter brought before the Board for consideration was the financing of the Sanatorium. The Secretary stated that the Board in assuming the management of the Sanatorium did so with the understanding from the former Board of Directors that the Sanatorium owed only about \$4,000, but that it was found from the accumulation of old accounts against the Sanatorium that it owed nearly \$12,000. The Secretary stated to the Board that he had misinformed the Executive Committee as to the balance which the Sanatorium had on hand May 19th; that at that time he stated to the Executive Committee that they had a balance of only \$6,600, the books showed a balance of \$11,096. The Secretary stated that with the present revenue basis the Sanatorium was running on—that is, an income from both State and patients of about \$4,000 a month—that the Sanatorium could get through the year provided it did not attempt the payment of the old debts in excess of \$4,000 which they assumed in taking over the management of the Institution.

After considerable discussion between Colonel Ludlow, Drs. Wood, Thompson and Rankin, it was moved by Dr. Laughinghouse that the Institution be instructed to pay only those old debts which in their judgment they found necessary in order to take care of the credit of the Institution. This motion was carried.

The Secretary then stated that he desired to bring before the Board the question of apportioning the expense of bookkeeping among the various departments. He called attention to the fact that the book-keeping required a considerable amount of work, practically all the time of one person; that the Board at present was handling something like \$110,000 a year, which had to be kept in the form of six or eight different accounts. Dr. Rankin suggested that the expenses of book-keeping be apportioned as follows: To the State Laboratory of Hygiene, \$25 a month; State Sanatorium, \$25 a month; Rockefeller Sanitary Commission, \$20 a month; Executive Department, \$20 a month; Bureau of Vital Statistics, \$10 a month. It was moved and carried that this apportionment of expenses be made.

The Secretary then called attention to a request from Mr. Kellogg for an increase of salary from \$1,800 to \$2,200 a year. Dr. Rankin on being asked by Dr. Laughinghouse what his recommendation was in regard to the increase stated that the finances of the Laboratory were in good shape and that he agreed with Dr. Shore in his estimate of Mr. Kellogg's services, but that before recommending an increase in salary he thought it would be well to find out what other Laboratories were paying for similar services. The Secretary was then instructed to make such an inquiry and report to the next meeting of the Board of Health or Executive Committee in order that they might take final action on the increase of salary requested by Mr. Kellogg.

The Secretary then stated that he wanted an increase in his own salary from \$3,000 to \$3,600 a year and gave as a basis for his request the following reasons: (1) That he had been in the service of the Board now for five years at a salary of \$3,000 and that his services now ought to be worth more than they were when he was inexperienced five years ago. (2) That his responsibility had increased more than one hundred per cent as measured by the amount of money being expended through his department and by the increase in the number of employees. (3) That the risk to his reputation—that is to say, to his earning capacity—was much greater in the future with the growth of the work and the increasing complications and responsibilities than it had been in the past. (4) That the executive work of the Board requires all of the Secretary's time, including many nights and Sundays. (5th) That the uncertainty of public office makes it necessary that the salary of a public official shall be sufficient to provide financial insurance against an unexpected termination of income. (6) The salary of the Secretary should be in proportion to the salaries paid by other Boards of Health for similar service, which are, according to a late report, as follows:

WHOLE-TIME STATE HEALTH OFFICERS IN ORDER OF SALARIES.

New York .....	\$10,000.00
Pennsylvania .....	10,000.00
Alabama .....	5,000.00
Massachusetts .....	5,000.00
Minnesota .....	4,500.00
California .....	3,600.00
Illinois .....	3,600.00

Indiana .....	\$ 3,600.00
Tennessee .....	3,500.00
Virginia .....	3,500.00
North Carolina .....	3,000.00
Florida .....	3,000.00
Iowa .....	3,000.00
Montana .....	3,000.00
Maine .....	2,500.00
Maryland .....	2,500.00
New Hampshire .....	2,500.00
Vermont .....	2,500.00
Missouri .....	2,400.00
Oklahoma .....	1,800.00

**PART-TIME STATE HEALTH OFFICERS IN ORDER OF COMPENSATION.**

Oregon .....	\$4,000 plus professorship.
Rhode Island .....	3,700 plus practice.
Washington .....	3,600 plus practice.
Ohio .....	3,500 plus professorship.
Wisconsin .....	3,250 plus practice.
Connecticut .....	3,000 plus professorship.
Kansas .....	2,500 plus professorship.
New Jersey .....	2,500 plus practice.
Idaho .....	2,400 plus practice.
Arkansas .....	1,800 plus practice and professorship.
Delaware .....	1,500 plus professorship.

Dr. Rankin called attention to the fact that amendments to the Vital Statistics Law permitting the State Registrar to receive one cent of the three cents paid for transcripts of birth and death certificates by the Federal Government passed by the last General Assembly would permit the Board to raise his salary to the figure requested. The Secretary asked to be excused while the Board considered this matter.

The Board finally passed the following resolution:

WHEREAS, that for furnishing the United States Census Bureau with transcripts of deaths and births the State Registrar may receive from the Census Bureau such compensation for this service not exceeding one cent for each certificate that the State Board of Health may approve, and

WHEREAS, Dr. W. S. Rankin, Secretary of the State Board of Health is performing the additional duty of Registrar of Vital Statistics, be it

*Resolved*, That he receive a compensation of \$50 per month as per chapter 15, section 2, of Public Health Laws, Extra Session 1913, said extra compensation to be made from funds derived from the Federal Government for furnishing transcripts of registration certificates on file in the office of the State Board of Health, subject, however, to the approval of the Attorney-General as to the legality of this compensation.

The Secretary was authorized to file a copy of the above resolution with the Attorney-General and get his opinion of it, which he would in turn file with the records.

Dr. Wood then called attention to the danger to the people of Wilmington from the sewage pollution of their public water supply. After discussing this danger Colonel Ludlow offered the following resolution, which was adopted:

WHEREAS, the recommendation of the State Board of Health at its annual meeting of 1912, held in Charlotte, as to the removal of the sewage of the city of Wilmington to a point below the city where the danger of pollution of the public water supply by the rising tide would be reduced, has not yet been complied with, and while appreciating the protection given through adequate and constantly applied means of treating and purifying the public water supply of the city of Wilmington taken from the present intake on the Cape Fear River, yet, in view of the excessive sewage contamination to which we believe the said river to be subject, and the possibility of a lack of efficiency in conducting the treating processes to which the water is subjected, be it

*Resolved*, That it is the conviction of the State Board of Health that the city of Wilmington will not be relieved from a condition which may duly arouse serious apprehension as to the safety of the public water supply in its bearing on the public health of the city of Wilmington until the discharge of sewage from the city shall be carried to a point some distance below the city or the water works intake shall be removed to a point up the river beyond the point where serious contamination from rising tide will not be obtained.

It was moved that a copy of this resolution be entered in the minutes and a copy of it be sent to the mayor of the city of Wilmington.

There being no further business to come before the Board, the meeting adjourned.

W. S. RANKIN, *Secretary.*

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#### Conjoint Session State Board of Health with North Carolina Medical Society

WEDNESDAY, JUNE 17TH, AT 12 O'CLOCK.

The meeting was called to order by Dr. J. Howell Way, Waynesville, President of the State Board of Health.

Dr. Way: Gentlemen of the Conjoint Session, and Fellow Members of the Society: I thank our distinguished member for his courteous introduction. I appreciate it. I do not deserve it. Without further ceremony, I will just remind you that the State Board of Health of North Carolina desires to be called a working order instead of a talking order. I, therefore, called the Conjoint Session together and take great pleasure in introducing to you Dr. W. S. Rankin, Secretary of the North Carolina State Board of Health of Raleigh.

Dr. W. S. Rankin presented the following as Secretary of the State Board of Health, including all departments under it:

ANNUAL REPORT OF THE SECRETARY OF THE NORTH CAROLINA  
STATE BOARD OF HEALTH.

(See Chapter 62, Section 8, Laws of 1911.)

W. S. RANKIN, M.D., RALEIGH.

*Mr. President, Members of the State Board of Health, and Fellow Members  
of the North Carolina Medical Society:*

CONFIDENCE OF STATE IN THE PROFESSION.

I am required by the people of this State to render to you at this time an account of the work of the State Board of Health for the past year. And why, may you ask, should the people of this State require that the activities of a branch of their government be brought to your attention and passed upon by you? This requirement is one of the highest compliments that the State could pay a profession, for it is the official expression of the confidence of North Carolina in both the sincerity and the wisdom of your interest in the conservation of the health and life of her people. Hear me then, brethren, not to be entertained, but to be worthy of your State's confidence.

GROWTH AND DIFFERENTIATION OF STATE HEALTH WORK.

One of the laws of growth is that which keeps the proportion between mass and surface constant through differentiation and division of labor. An institution that grows in accordance with the wisdom of this natural law will differentiate its work into departments or bureaus as the demand and capacity for work increases. The last year will go down in the history of the Board as marking the period of its greatest differentiation and organization. During this time four new bureaus or departments have been established, making, with the two bureaus already in existence, six departments or bureaus. The departments or bureaus of the Board, in the chronological order of their establishment, are the State Laboratory of Hygiene, the Bureau for the Eradication of Hookworm Disease, the Bureau of Engineering and Education, the Bureau of County Health Work, the Bureau of Vital Statistics, and the Sanatorium and Bureau of Tuberculosis.

The plan of organization of the State Board of Health is indicated on the chart.

(Here is shown Chart 1.)

The Board is seen to be a body in touch on the one hand with the Governor through five lines that signify his five appointees on the Board; and in touch on the other hand with the State Medical Society through four lines that signify the four members of the Board elected by this Society. Your Board of Health, therefore, represents jointly the State Government and the State profession, and stands as an official recognition of the natural partnership between society and the medical profession in the conservation of human life.

Under the Board is an executive office through which the Board is in touch with all divisions of its work. Note that each department or bureau is independent of all other bureaus. In placing all the bureaus

on the same plane, the stimulus of individuality and the advantages of specialization are preserved to each bureau, while the symmetry of the Board's activities is maintained through the connection of all the bureaus or departments with the executive office.

I shall now touch briefly upon the work of each bureau or department during the past year.

#### THE STATE LABORATORY OF HYGIENE.

The two charts show the work and the growth of the Laboratory of Hygiene during the past five years. In preparing these charts a classification of the work into the regular work of the Laboratory and into the irregular and new work of the Laboratory was deemed advisable for the sake of clearness.

The first chart shows the different kinds of work that the Laboratory has pursued uninterruptedly for the last five years. Please note especially the following interesting facts:

REGULAR WORK OF THE STATE LABORATORY OF HYGIENE FOR LAST FIVE YEARS.

Years	Appropriation	Water	Sputa	Widals	Diphtheria	Rabies	Pasteurs	Malaria	Urine	Gonococci	Pathological	Miscellaneous	Totals	Growth
1909-'10	\$ 6,000	1,680	516	264	377	148	158	69	92	34	88	25	3,451	66.0%
1910-'11	6,000	1,920	771	486	364	159	165	119	68	52	39	20	4,127	16.3%
1911-'12	8,000	2,449	924	732	547	199	195	132	92	46	38	41	5,397	23.5%
1912-'13	8,500	2,183	1,091	790	660	298	259	196	83	78	39	28	5,705	5.4%
1913-'14	13,000	2,988	1,473	1,094	593	371	231	292	133	92	28	24	7,319	22 %
<b>Totals</b>	<b>42,000</b>	<b>11,220</b>	<b>4,775</b>	<b>3,340</b>	<b>2,541</b>	<b>1,175</b>	<b>1,008</b>	<b>808</b>	<b>458</b>	<b>304</b>	<b>232</b>	<b>138</b>	<b>25,999</b>	<b>133.2%</b>
<b>Averages</b>	<b>8,400</b>	<b>2,244</b>	<b>955</b>	<b>668</b>	<b>508.2</b>	<b>235</b>	<b>201.6</b>	<b>161.6</b>	<b>91.6</b>	<b>60.8</b>	<b>46.4</b>	<b>27.6</b>	<b>5,199.8</b>	<b>26.64%</b>

(a) A continuous growth during the last five years in sputa, Widal, rabies and malarial examinations.

(b) A marked growth during the last five years, with slight annual fluctuations, in water, diphtheria, urine, gonococci, miscellaneous and pathological examinations.

(c) That the last year's work was the largest year's work in the history of the Laboratory.

(d) That there has been an average annual gain or growth in the Laboratory work for the last five years of 26.6 per cent.

(e) That during the last five years the Laboratory work has more than doubled.

#### IRREGULAR AND NEW WORK OF THE STATE LABORATORY OF HYGIENE FOR LAST FIVE YEARS.

Years	Stool Examinations	Distribution of Antitoxin	Distribution of Typhoid Vaccine
1909-'10	678	----- units	Immunizations
1910-'11	22,865	----- units	----- estimated
1911-'12	9,581	10,287,000 units	----- estimated
1912-'13	7,285	12,995,000 units	----- estimated
1913-'14	1,821	9,254,000 units	10,000 estimated

The second chart shows the irregular and new work of the Laboratory during the last five years. The falling off in stool examinations in 1910 and 1911 was due to the Rockefeller Sanitary Commission having the stool examinations made in the field by the field directors instead of in the Laboratory. This chart also shows the amount of antitoxin distributed by the Laboratory during the last three years. The amount of antitoxin distributed by the Laboratory does not by any means represent the value of this feature of its work. As soon as the State began to supply an antitoxin guaranteed by the United States Government as reliable at practically one-fourth the original retail price, the various manufacturers of antitoxin immediately cut the retail price of their antitoxin to meet the State's competition, and it is, therefore, no longer necessary for a citizen to buy State antitoxin to get a reliable and reasonably cheap antitoxin.

Within the last year the Laboratory has begun a new work—the preparation and distribution of free typhoid vaccine. This new work is capable of having a greater influence on the State's death rates than any other phase of the Laboratory work, with the possible exception of water analysis. The amount of vaccine distributed the last seven months was sufficient to immunize about ten thousand persons against typhoid fever.

The Laboratory, as you all know, is under the direction of Dr. C. A. Shore.

#### THE BUREAU OF HOOKWORM ERADICATION.

Nearly a year ago, Dr. John A. Ferrell, one of the ablest health officers in this country, was called from the Bureau of Hookworm Disease, which he had founded, to very responsible duties in the central offices of the Rockefeller Sanitary Commission at Washington. Dr. C. I. Pridgen succeeded Dr. Ferrell as State Director of the work for the eradication of hookworm dis-

ease. Dr. Pridgen resigned in May of this year to take up private practice, and Dr. W. P. Jacocks, utility man of the Commission, is temporarily filling the vacancy created by Dr. Pridgen's resignation. The work of the Rockefeller Commission, as shown by the official reports of the Commission, is indicated on the chart.

#### HOOKWORM WORK.

	1910	1911	1912	1913
Examined.....	7,949	37,328	135,867	104,607
Treated.....	8,000	45,881	57,091	54,059

• A hookworm campaign has been carried on in ninety-eight counties of the State, is being carried on in the ninety-ninth, and has been provided for in Ashe, the last county to vote funds for this work. Within a few weeks, the entire State will have been covered.

Second campaigns have been held in seven counties, and the results of the second campaigns have fallen short of expectations. A comparison of the results of the first and second campaigns in these seven counties show that during the first campaign, as compared with the second campaign, the number of people examined in the average county was 3,666 as against 801, and the number treated 1,338 as against 249. The cost of treatment per case during the second campaign was something over \$2. The Commission is somewhat at a loss to understand the falling off of the work in the second campaign as compared with the first. The following explanations have been suggested:

- (a) Indifference, due to loss of novelty.
- (b) Unpleasant effect of salts and thymol.
- (c) Persistent skepticism.

The disappointing results of the second campaign, coupled with the high cost per case treatment, made it seem advisable to look for a new method of attack. The new method adopted consists in selecting a community of from twenty to thirty square miles, with a population of from twelve to fifteen hundred people, and attempting the complete eradication of hookworm disease from such community through the administration of thymol to all infected people and the construction of 75 per cent grade privies at all homes.

#### BUREAU OF EDUCATION AND ENGINEERING.

This is the educational agency of the Board, and the bureau to which all engineering problems are referred. The Bureau is under the direction of Mr. Warren H. Booker. Its work during the past year has consisted in:

- (a) Preparation, publication and distribution of a forty-thousand monthly edition of the Bulletin to the leading citizens of the State.
- (b) On special request of interested citizens and officials, the distribution of about one million pieces—pamphlets or leaflets—of health literature.
- (c) Of mailing letters from the Governor of the State and also from the Board of Health, together with a pamphlet on the care of babies, to each mother whose baby's birth is registered in the Bureau of Vital Statistics.
- (d) Supplying the newspapers of the State with regular, nontechnical, popular weekly newspaper articles on health subjects.

(e) Giving a health exhibit in connection with a baby contest at the State Fair, which, according to newspaper reports, was one of the principal features of the Fair and of considerable educational value.

(f) Giving advice or supplying assistance to thirty-three cities and towns for installing or altering their public water supplies or sewage disposal plants, and in advising a number of individuals about sewerage for their homes.

(g) Passing upon the quarterly reports of the sanitary conditions of the watersheds of all the surface water supplies of the State, in connection with the Laboratory's findings showing the chemical and bacteriological conditions of the water, and in calling the attention of the proper State and local authorities to any danger indicated through such reports and findings.

#### BUREAU OF COUNTY HEALTH WORK.

Eleven counties in North Carolina, to wit, Buncombe, Columbus, Durham, Forsyth, Guilford, Johnston, Nash, New Hanover, Robeson, Rockingham and Sampson, employ whole-time county health officers. While there are several states employing more whole-time health officers than North Carolina, our State leads the states of the Union in having the largest number of whole-time county health officers.

The county health problem offers at once greater difficulties and greater possibilities than any other health problem. The difficulties are worthy of the patience of Wood, the diplomacy of Lewis, and the persistence of Ferrell. Unlike any other State health policy, unlike the laboratory policy, the hook-worm policy, the educational policy, the engineering policy, the vital statistics policy and the tuberculosis policy, all of which are under the sole jurisdiction of the State, the county health policy is under the double government of the State and county, a divided jurisdiction. Along the hazy boundary between State and county jurisdiction lies the danger zone to the full development of county health work. If the State does not go as far as it can in helping the county, the best possible results are not obtained; if the State goes too far, the county resents it. The most fundamental principle of our government, that of local self-government, is involved in handling the county health problem.

In accordance with the fundamental purposes of the Board of Health, a Bureau of County Health Work has been established. The work of this Bureau is:

(a) To assist interested individuals and organizations in county campaigns for whole-time health officers.

(b) To prepare and furnish health literature, placards, pamphlets and multigraphed letters to county health officers.

(c) To attempt to correlate, systematize and standardize the work of county health officers.

This bureau is under the direction of Dr. Platt W. Covington.

#### THE REPORT OF THE BUREAU OF VITAL STATISTICS.

The State-wide vital statistics law went into effect July 1, 1913. This law is known to the registration officials of the entire country as the "Model Vital Statistics Law." It expresses the combined registration experience of the country, as interpreted by a committee representing the Bureau of the Census of the National Government, the American Medical Association, and

the American Public Health Association. The law is revised from time to time to meet every decision of supreme courts affecting the collection of statistics. This model law, with slight modifications to adapt it to individual States, has been adopted by practically every State that has been admitted to the registration area of the Union during the last ten years.

From July to December, 1913, five months, the work of the Bureau consisted in organizing itself, in securing the appointment of 1,400 local registrars by the chairman of the boards of county commissioners, in preparing the various blank forms and literature necessary in the execution of the act, and in securing and listing alphabetically all the doctors, undertakers, midwives, local registrars and others concerned in the proper enforcement of the law.

When one considers that State registration depends upon the intelligent, prompt, and cordial coöperation of 1,400 local registrars, 1,700 doctors, 1,300 midwives and 700 undertakers; and consists in securing a total of 11,000 birth and death certificates each month, or 130,000 birth and death certificates each year, he can readily understand that satisfactory registration can not be obtained in a day, a month or several months. Mississippi, with one of the best registrars in the United States, has been under the model law for two years, and is now only recording about one-half of her actual death rate, that is, about ten deaths per 1,000 of her population. Virginia, under registration for the past eighteen months, is recording a death rate of only thirteen and a fraction per thousand, far from complete, as compared with the average death rate for the United States and southern cities.

The Bureau of Vital Statistics, under the direction of Dr. J. R. Gordon, who is appreciated by both profession and public for his fine service to the State during the last ten years in the General Assembly, has made an exceptional record. As proof of this statement, note the rapid and steady progress of the registration work, as indicated by the total number of certificates received during the last four months:

February .....	4,484
March .....	7,131
April .....	8,261
May .....	9,481

Please note on the following chart showing birth registration that twenty-four counties have, for the first four months of the registration period, made practically complete returns. Note, too, the place of your county on the chart. The thoroughness of the birth registration for these counties can be appreciated by comparing these rates with the average birth rate per thousand for the United States which is 26.6 per 1,000 population. Taking the returns for last month instead of the average for the last four months, sixty counties show complete birth registration.

## BIRTHS.

County	Rate	County	Rate
Transylvania.....	39.4	Wilkes.....	21.9
Yancey.....	35.7	Mecklenburg.....	21.8
Clay.....	35.1	Rockingham.....	21.7
Stanly.....	33.4	Cumberland.....	21.2
Perquimans.....	32.7	Granville.....	21.1
Watauga.....	32.1	Chatham.....	20.9
Henderson.....	31.5	Buncombe.....	20.6
Alleghany.....	30.9	Lee.....	20.6
Ashe.....	30.6	Tyrrell.....	20.4
Warren.....	29.8	Edgecombe.....	20.3
Caldwell.....	29.5	Caswell.....	20.2
Iredell.....	29.5	Halifax.....	20.2
Gaston.....	29.4	Davie.....	20.0
Swain.....	28.8	Beaufort.....	19.7
Haywood.....	28.8	Franklin.....	19.6
New Hanover.....	28.5	Chowan.....	19.5
Cleveland.....	28.1	Columbus.....	19.1
Cherokee.....	27.9	Hyde.....	18.6
Cabarrus.....	27.4	Stokes.....	18.6
Brunswick.....	26.7	Wayne.....	18.4
Anson.....	26.3	Camden.....	18.0
Martin.....	26.2	Duplin.....	18.0
Orange.....	26.2	Alamance.....	17.9
Randolph.....	26.1	Hertford.....	17.8
McDowell.....	25.9	Moore.....	17.1
Dare.....	25.8	Harnett.....	16.9
Montgomery.....	25.8	Alexander.....	16.5
Johnston.....	25.6	Graham.....	16.1
Person.....	25.2	Gates.....	15.4
Pamlico.....	24.9	Bladen.....	15.1
Forsyth.....	24.4	Polk.....	15.0
Wake.....	24.4	Onslow.....	14.9
Catawba.....	24.3	Rutherford.....	14.9
Avery.....	24.3	Scotland.....	14.6
Davidson.....	24.1	Pender.....	14.3
Guilford.....	24.0	Craven.....	14.1
Mitchell.....	23.9	Washington.....	13.9
Durham.....	23.5	Wilson.....	13.9
Vance.....	23.5	Jackson.....	13.6
Madison.....	23.3	Richmond.....	12.9
Union.....	23.2	Greene.....	12.5
Macon.....	23.0	Pitt.....	12.0
Yadkin.....	23.0	Nash.....	10.8
Rowan.....	22.8	Robeson.....	10.8
Sampson.....	22.7	Lenoir.....	10.4
Carteret.....	22.5	Currituck.....	8.2
Burke.....	22.3	Hoke.....	8.2
Surry.....	22.2	Northampton.....	8.1
Pasquotank.....	22.2	Jones.....	7.3
Lincoln.....	22.0	Bertie.....	5.8

Note on the following chart showing death rates that twenty-one counties have the average or more than the average United States rate of fifteen per 1,000 for the last four months. Taking the returns of last month, thirty-one counties registered more than the average death rate. Please scrutinize these charts and tell the chairman of your board of county commissioners and

the editors of your county papers, when you go back home, where you found your county in the registration work of the State—toward the top or toward the bottom of the list.

## DEATHS.

County	Rate	County	Rate
Cleveland.....	28.1	Stokes.....	10.9
New Hanover.....	26.7	Surry.....	10.8
Beaufort.....	24.0	Pitt.....	10.7
Forsyth.....	22.0	Polk.....	10.5
Vance.....	21.8	Caldwell.....	10.4
Henderson.....	21.7	Yancey.....	10.2
Guilford.....	19.2	Dare.....	10.1
Columbus.....	19.2	Rockingham.....	10.0
Buncombe.....	17.6	Harnett.....	10.0
Halifax.....	17.6	Catawba.....	10.0
Durham.....	17.6	Brunswick.....	10.0
Craven.....	17.3	Anson.....	10.0
Franklin.....	17.0	Granville.....	9.9
Mecklenburg.....	17.0	Moore.....	9.8
Pasquotank.....	16.9	Ashe.....	9.7
Alamance.....	16.9	Lincoln.....	9.7
Warren.....	16.8	Tyrrell.....	9.6
Edgecombe.....	16.7	Haywood.....	9.5
Wake.....	15.6	Pamlico.....	9.3
Lee.....	15.2	Watauga.....	9.2
Alexander.....	15.0	Lenoir.....	9.2
Wayne.....	14.9	Union.....	9.1
Cabarrus.....	14.8	Swain.....	9.0
Gaston.....	14.3	Rutherford.....	8.9
Washington.....	14.2	Macon.....	8.8
Transylvania.....	14.1	Duplin.....	8.6
Iredell.....	13.9	Cherokee.....	8.5
Wilson.....	13.7	Caswell.....	8.2
Orange.....	13.6	Currituck.....	8.2
Alleghany.....	13.5	Pender.....	8.0
Randolph.....	13.3	Bladen.....	7.8
Cumberland.....	13.1	Greene.....	7.8
Martin.....	13.1	Wilkes.....	7.7
Davidson.....	13.0	Yadkin.....	7.4
Clay.....	12.8	Onslow.....	7.3
Burke.....	12.7	McDowell.....	7.2
Chatham.....	12.6	Richmond.....	7.1
Perquimans.....	12.5	Scotland.....	7.0
Rowan.....	12.4	Northampton.....	6.8
Montgomery.....	12.4	Madison.....	6.6
Chowan.....	12.2	Mitchell.....	6.3
Hertford.....	12.1	Robeson.....	6.0
Carteret.....	11.9	Gates.....	6.0
Davie.....	11.9	Camden.....	6.0
Johnston.....	11.8	Bertie.....	5.5
Stanly.....	11.5	Hoke.....	5.4
Person.....	11.3	Jackson.....	5.3
Nash.....	11.3	Avery.....	4.0
Hyde.....	11.0	Graham.....	2.4
Sampson.....	11.0	Jones.....	2.0

This is most gratifying progress. To get it, the Bureau has mailed since the first of February, when Dr. Gordon took charge, 6,114 personal letters, 26,688 multigraph letters, and 15,766 provisional certificates, and has sent 1,828 packages of supplies to undertakers, physicians and registration officials.

This amount of work, turned in so short a time by an untried force of workers engaged in a new field, has been impossible without a few mistakes. The faster you drive a machine the greater the liability to accident; the harder you drive a force of workers, the greater the liability to mistakes. To me the saying of Mr. Roosevelt, to wit, "The man who never makes a mistake never does anything," often brings comfort. Some little friction between those in the statistical work in the central office and those in the statistical work in the field, the doctors, undertakers and local registrars, has been inevitable. Sometimes the central office has been at fault; sometimes those in the field have been at fault. The central office, in sending out circulars to delinquent registrars, doctors and undertakers, has in several instances included in the list of those to whom the letters were addressed registrars, doctors and undertakers that should not have received such letters. We are sorry for this. As the work becomes better organized and the force of workers more experienced, these mistakes will be eliminated. In the meantime, we beg your patience, and we are sincerely appreciative of the praiseworthy coöperation of all those in the field concerned in this work, and most especially do we appreciate the coöperation of the medical profession, which is so evident in the very satisfactory birth registration, for which the profession is primarily responsible.

#### THE BUREAU OF TUBERCULOSIS, INCLUDING THE SANATORIUM.

North Carolina has a perfectly definite, clear-cut State policy for handling the problem of tuberculosis. The reason for adopting such a policy is that tuberculosis stands apart from all other problems of a health department, in that it causes one-fourth of all preventable deaths, and therefore furnishes one-fourth of the total opportunity of a board of health to conserve human life.

The first consideration underlying the State tuberculosis policy is that the tuberculosis problem in bulk, undivided, is bigger and heavier than the State government can carry. The simplest calculation will make this statement evident. There are from 15,000 to 18,000 cases of active tuberculosis in North Carolina; from 7,000 to 10,000 of these are white and at least 2,000 of the 7,000 are unable to procure the proper treatment. It costs, according to reports from the sanatoria of the United States, \$1.66 a day to care properly for a case of tuberculosis, but in order to be conservative in our estimate, let us say that in taking care of as many as 2,000 cases, the cost could be reduced to \$1 per capita per diem. Then it would cost the State to care for her 2,000 needy consumptives \$2,000 per diem, or \$730,000 per annum, which is about one-fourth the total revenue of our State government.

The second consideration underlying the State tuberculosis policy is that a burden that can not be carried in bulk, can be carried when it is divided and apportioned. The tuberculosis burden, too heavy for the State by itself, can be divided and apportioned to the various political organizations (counties, cities and municipalities), and to the industrial, social, fraternal and religious organizations, so that it can be handled easily and effectively.

This apportionment will be made by the Bureau of Tuberculosis somewhat as follows:

(a) To the State the task of furnishing shelter, grounds and properly constructed buildings, and expert attendants, physicians and nurses, to care for her consumptive children, a task involving an expenditure say of \$65,000 or \$75,000 a year.

(b) To the county the task of endowing from one to five beds at a cost of from \$365 to \$1,800 a year for the use of worthy incipient tuberculosis citizens of the county assigned to the Sanatorium by either the county board of health or county board of commissioners. But for the absence of a law permitting the counties to do this, which law will be enacted by the Next General Assembly, several counties would already be looking after their needy and worthy tuberculous subjects in this way.

(c) To the large corporations and manufacturing plants of the State the privilege of erecting and endowing cottages on the State grounds for the use of their tuberculous employees. This will be the least burdensome and most effective way through which industrial organizations can care for this health problem. Already one of our most spirited and largest corporations is seriously considering taking this step.

(d) To the fraternal orders, the privilege of endowing beds in the Sanatorium for the use of their members. Already the Masons have appropriated \$500 for this purpose and have appointed a committee to consider and present to the Grand Lodge a plan of permanent endowment of beds for consumptive Masons. The Odd Fellows have followed the good example of the Masons and have already appropriated \$450 for the care of an orphan child.

(e) To civic leagues, social service clubs, and anti-tuberculosis societies, which will be organized under the Bureau of Tuberculosis, the privilege of assisting the needy and worthy consumptives in their communities to secure treatment in the Sanatorium. Already several social clubs have sent patients to the Sanatorium.

(f) To individual churches and church organizations the privilege of endowing beds to the Sanatorium for their members and the nondescript who is down and out on the road between Jerusalem and Jericho, and whom the priest and Levite of the modern church must not pass by.

The third consideration underlying the State policy is that any attempt at the effective management of the tuberculosis problem must make prevention its aim and cure an incident. It may be an open question whether sanatoria as curative agencies justify public expenditures; it is not an open question whether sanatoria as preventive agencies justify public expenditures. The person admitted to the Sanatorium may or may not get well, but the family from which he is separated are less liable to contribute other victims to the disease. The Sanatorium, then, is an agency of prevention that encourages the removal of infected from uninfected members of families and households. In this way, the Sanatorium is an agency of prevention primarily, of cure secondarily. Again, the Sanatorium becomes a preventive agency when its patient, unimproved, or cured, goes back home. Such a patient has been impressed with his or her moral responsibility for the safety of his or her associates, and has learned the sanitary conditions under which such moral responsibility to others may be borne conveniently. These patients become missionaries in their communities, telling and demonstrating to those not

so fortunate as to have had sanatorium training the importance and means of living safely with their families.

While the Sanatorium will correspond, as above indicated, to a training school, to a central university for teaching our tuberculous population how to live and let live, the policy that we have adopted contemplates in a short time enforcing the law requiring that all cases of tuberculosis shall be reported to the Bureau of Tuberculosis, which will be established at the Sanatorium, and that each unreported case, some fifteen to eighteen thousand cases in North Carolina in all, shall be matriculated as a member of a correspondence school and taught through intelligently sympathetic, unofficial letters, first, the way to prevent infecting their homes, and second, the best means of getting well.

The State Board of Health could give the public no surer guarantee of their determination and their ability to carry out effectively the above policy than the man, Dr. L. B. McBrayer, who at a great financial sacrifice to himself has consented to do this work.

DR. ALBERT ANDERSON, Raleigh: I think that this report ought to have the notice of this Society, because of the work that has been done by the State Board of Health, and second, because it is the most encouraging report I have ever listened to. I move that the report be received with our thanks and best wishes.

This motion was carried and the report was adopted.

DR. J. T. SIKES of Grissom: It has been my privilege for a number of years to hear the report of the State Board of Health, but the report made today is such a fine field of work and so important that I can but feel that every doctor present and every citizen in North Carolina should be proud of the work of the State Board of Health. I am exceedingly proud to accept it and feel that so much is being done for the health and preservation of the people.

DR. J. HOWELL WAY, President: Is there further discussion?

DR. W. S. RANKIN: Gentlemen, I wish to say that I deeply appreciate your action in regard to my report, and that it is appreciated by all the men who are employed in the State health work. The work now requires something like forty or fifty men, who are all equally appreciative of the way you feel about it.

DR. J. HOWELL WAY: There being no further discussion, and official reports to be presented, I would now like to offer the opportunity to any member of the Society to discuss the health work of North Carolina. I hear nothing, but I do not take it that this silence should be recognized. I hope that each member present will feel free to discuss each paper that is read. Is there anything further to be brought to the attention of the Conjoint Session? If not, the Conjoint Session is adjourned.

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#### Called Session of the State Board of Health

RALEIGH, N. C., October 6, 1914. 10 A. M.

All the members of the Board were present.

After calling the Board to order, the President congratulated the Board on having Dr. Lewis with it. Dr. Lewis expressed his pleasure at being present.

The President asked for the minutes of the last meeting and was informed by the Secretary that it would require something over an hour to read the minutes, whereupon Dr. Kent moved in view of the large amount of business before the Board that the reading of the minutes of the last meeting be dispensed with. This motion was carried.

The Secretary stated that the purpose of the meeting was to consider mainly the legislative program of the Board for the General Assembly of 1915 and incidentally the disposition of certain accounts against the Sanatorium.

The account of Messrs. Mussellwhite & Cox, who were the contractors for the new building at the Sanatorium, was then presented to the Board by Superintendent McBrayer, Mr. Cox and Mr. Stephen McIntyre, attorney for Mussellwhite & Cox. After a lengthy discussion of this account it was finally moved by Dr. Kent that the account of Messrs. Musselwhite & Cox and all other accounts against the Sanatorium made prior to December 1, 1913, and accounts concerning which there was some question be referred to a committee for investigation and that the committee be instructed to approve all just accounts made prior to December, 1913, and present a bill to the General Assembly providing an appropriation sufficient to wipe out this old indebtedness of the Sanatorium.

President Way later appointed the following committee: Dr. Laughinghouse, Dr. R. H. Lewis, and Col. J. L. Ludlow.

President Way suggested to the Secretary that he notify creditors holding accounts against the Sanatorium made prior to December, 1913, that if they would send these accounts in to the aforesaid committee with evidence of the validity of the account that such accounts would be included in the request of the General Assembly for an appropriation to cover the old indebtedness of the Sanatorium.

Dr. C. A. Shore, Director of the State Laboratory of Hygiene, was then asked by the President to state the legislative needs of the State Laboratory of Hygiene. Dr. Shore stated that the greatest need of the State Laboratory of Hygiene was for an antitoxin farm. He called attention to the fact that the Laboratory already had forty acres of land well located for such a purpose and that he estimated it would require an appropriation of \$10,000 for the building and equipping stables and laboratories on this land for antitoxin and serum work and \$5,000 annually for the maintenance of such a plant. Such plant would make diphtheria antitoxin, typhoid vaccine, smallpox vaccine and possibly tetanus antitoxin. The Board seemed deeply interested in Dr. Shore's proposal and several members of the Board expressed themselves as enthusiastically in favor of the proposition. Dr. Kent stated that if he should be a member of the General Assembly of 1915 he thought he would have very little trouble in securing an appropriation of \$10,000 for equipment and \$5,000 annually for maintenance. He pointed out that the action of the General Assembly with reference to supplying antitoxin to the people of the State at a reduced cost at wholesale prices was one of the most popular things the General Assembly of 1911 did.

It was finally moved that the General Assembly be requested to appro-

priate \$15,000 for the construction of such a plant and \$7,500 annually for its maintenance. The motion was unanimously carried.

Dr. Wood called attention to the carelessness of drug stores in the keeping of serums and vaccines. He stated that his observation was that there were very few druggists who kept their serums and vaccines in a refrigerator. Dr. Shore on being asked at what temperature these products should be kept stated that they should be kept at a temperature of from twenty to thirty degrees.

Dr. Laughinghouse finally moved that people, especially the physicians and pharmacists of North Carolina, should be informed by the Board of Health as to the proper conditions under which these serums and vaccines should be kept. The motion was seconded and unanimously carried.

Dr. Jacocks was then asked if the Bureau for Hookworm Eradication had any legislation to suggest for the approval of the Board. Dr. Jacocks explained the change in the work of his Bureau from the dispensary plan of hookworm work to the community plan. He stated that the Rockefeller Commission proposed to continue their appropriation until the last of March and that he would suggest that the \$8,000 now appropriated by the State for the Eradication of Hookworm Disease be continued until that time.

Dr. Rankin stated that Dr. Gordon, Chief of the Bureau of Vital Statistics, had requested him to ask the approval by the Board of Health of the following legislative program:

1. That the Board approve an amendment to the Vital Statistics bill requiring burial permits prior to removal or burial of bodies dying in rural districts. He stated that we were urged to do this by the United States Bureau of the Census and that such an amendment would do much toward making our registration more complete and giving us better standing among the registration States.
2. That the Board of Health approve legislation requiring the registration of midwives with the State Registrar, requiring midwives to obtain license from the State Registrar on the recommendation of the county authorities before practicing midwifery, and making the rescinding of the license the penalty for the nonregistration of births by midwives.
3. Dr. Gordon requested \$1,000 additional appropriation, most of which would be needed for making county indices of births and deaths for filing with the county clerk at the end of each registration year.

The Board readily approved the first and third requests, but after considerable discussion and after a rather general expression of inability to get the bill dealing with midwives through the General Assembly and of the advisability of going before the General Assembly with such a request, the second request of the Bureau of Vital Statistics was declined.

Mr. Booker, on being called upon to state the legislative needs of his Bureau, discussed in detail the work and difficulties of the Bureau of Engineering and Education under present conditions and pointed out that for a proper extension of the work an appropriation of \$5,000 would be necessary. It was moved and carried that this additional appropriation be included in the Board's legislative budget.

A committee representing the State Dental Association with Dr. Stanley of Wilmington, as chairman, and Drs. Fleming and Horton of Raleigh, as associates, then appeared before the Board to ask that the Board use a part of its appropriation, as much as \$4,000 annually, for equipping and maintaining a Bureau on Oral Hygiene. This committee pointed out the importance of this field of sanitation, its neglect and results that might be expected from an investment in this feature of public health work. The Board decided to leave this matter open until after the adjournment of the General Assembly, when the Board would know just what its appropriation for the next two years would be.

A committee representing the State Optometrical Society, headed by Dr. Mitchell of Winston-Salem, then appeared before the State Board of Health to ask that the Board by appropriate resolutions should endorse the efforts of the State Optometrical Society to raise the standard for the license of optometrists in this State by legislation requiring that optometrists should attend a recognized optometrical school for at least two years before applying for license. After considerable discussion of this subject the Board of Health finally decided that whereas the State Board of Health of North Carolina had never participated in securing legislation regulating the qualifications of those who practiced the healing art in this State, that the Board would adhere to its precedent and not take official action in legislative matters of this kind, but would refer the committee to the North Carolina Board of Medical Examiners, the official representatives of the North Carolina Medical Society in legislative matters dealing with the qualifications for the practice of medicine.

The next item that was considered was the matter of Mr. Kellogg's salary for the position which he holds in the State Laboratory of Hygiene. This matter had gone over from the previous meeting of the Board in June, with instructions to the Secretary of the Board to ascertain by correspondence the amount of salaries of the laboratory assistants in the various States. The Secretary submitted the results of this correspondence to the Board, whereupon it was moved and carried that the Board should leave Mr. Kellogg's salary as it is for the present.

Dr. McBrayer then took up the question of the Sanatorium with reference to its present condition and with reference to possible extensions of the work. He pointed out elaborately the handicaps under which the tuberculosis work of the State is being carried on at present, showing by diagrams the different buildings and the disadvantages connected with them. He also showed by diagram the proposed buildings of the future and discussed the various advantageous features of the proposed plant. In the discussion Dr. McBrayer gave the cost of various items, which amounted to \$140,000 for equipment for the next two years and \$50,000 annually for maintenance.

Dr. McBrayer further discussed the development of the correspondence school and the furnishing of patients throughout the State with sputa cups and needed information.

It was moved and carried that for the present no indigent patients be taken unless the expenses for such patients could be arranged for with some organization, political, social or fraternal.

It was further moved and carried that the next Legislature be asked to pass a bill permitting county commissioners to appropriate funds for the treatment of citizens of the county in the Sanatorium.

Dr. Rankin then spoke to the Board in regard to plans for the development of county health work. He called the attention of the Board to the fact that now was the critical time in the development of county health work; that if the State did not exercise supervisory and directing control over those counties that desired state assistance in the planning of their health work the counties would go on with a plan of their own; that there would be no system or relation between the counties in this work, no standard plan and no way of knowing just what was being accomplished; that this entire piece of work, which the speaker said he regarded as the most important phase of state health work, would become a chaos from an administrative standpoint. Dr. Rankin pointed out that after the counties had developed their own work five or ten years hence it would be impossible, or very difficult, to say the least, to standardize and systematize the county work.

Dr. Rankin further pointed out the fundamental relation of county work to state work. He made the point that the State Board of Health had developed about all the state health policies that were necessary and that the next important move lay in the direction of the county. He pointed out the means by which county health work could be standardized—that is, the relative efficiency of county health officers established—and pointed out further the bearing of standard county health work on the state work. The speaker stated as his deliberate opinion that the entire future of the Board rested upon the development of efficient county health work more than upon everything else that they might undertake.

Dr. Rankin went somewhat into detail in discussing the plan of county health work. In doing so he called attention to recent conferences and correspondence with Dr. John A. Ferrell, representing the Rockefeller Sanitary Commission, who had proposed a plan of community-county work, which Dr. Rankin had first endorsed but later rejected. Dr. Rankin stated that his plan for developing the county health work consisted in the establishment of a Bureau of County Health Work, with Dr. G. M. Cooper of Clinton, as its chief; that he and Dr. Cooper would attempt to correlate the work in the various counties and keep the proper literature prepared for and supplied to the county health officers. Dr. Rankin also described the plan by which he hoped to train recent graduates of medicine for positions of whole time county health officers, giving these men practical training in the various departments of the Board and in the different counties for such work.

Dr. Rankin then raised the question as to whether or not it was time to establish some correlating agency in the municipal health work that is developing in the State; that is, a bureau on municipal sanitation. President Way and several members of the Board seemed to think that the correlation of municipal health work could be handled properly through an assistant in the bureau of county health work; in other words, that one bureau on local health work would be sufficient and

better than two separate bureaus, one on rural and one on municipal sanitation.

Dr. Rankin then discussed the request for an antitoxin farm and an appropriation for that purpose and opposed the proposition. In opposing this proposition he called attention, (1) to the fact that only three States were doing such work and that the leading public health States in the Union were not engaged in it; (2) to the fact that North Carolina by buying antitoxin at wholesale prices secured antitoxin at a lower rate than Georgia could manufacture her own antitoxin; (3) that to give away antitoxin leads to extravagance on the part of profession and people. He stated in this connection that South Carolina on an annual appropriation of \$18,000 spent \$10,000 a year to purchase and give away antitoxin. Dr. Rankin called attention to the fact that if the State begins the practice of giving away antitoxin and later finds that it is a mistake it will be a mistake that is hard to correct in that its correction will call for, (1) an admission of error on the part of the Board, and (2) after the people have been given something they will object to having it taken away from them. There was a general discussion participated in by Dr. Thompson, Dr. Shore, Dr. Wood, Dr. Laughinghouse, Dr. Kent and Colonel Ludlow, all of whom spoke favorably of the antitoxin proposal.

Dr. Rankin discussed the advisability of some kind of convict camp sanitary regulations on the part of the Board. Dr. Kent spoke in favor of such a regulation and it seemed to be the sense of the Board that efficient convict camp sanitation supervised by the Board would be advisable.

Dr. Laughinghouse spoke appreciatively of the anti-pellagra work under the Pellagra Commission of the Board, whose chairman is Dr. Wood. He suggested that the Board provide Dr. Wood with the necessary clerical service, the assistance of a stenographer and postage for the prosecution of his work, if Dr. Wood desired assistance. Dr. Wood thanked Dr. Laughinghouse for his remarks and discussed the problem of pellagra in a brief yet comprehensive way. He stated that the best we could do from the standpoint of prevention at present was to advise general cleanliness, especially in regard to the disposal of sewage and the destruction of vermin.

The Board then passed the following resolutions: (1) A resolution approving an appropriation for all purposes of \$50,000; (2) A resolution that the antitoxin proposal should go before the Legislature in the form of a separate bill; and (3) That Dr. McBrayer's proposed request of the Legislature be approved.

Dr. Way suggested that the dentists be informed of the interest of the Board in the question of oral hygiene and that the attention of their committee be called to various articles published in the Bulletin dealing with this important matter.

A motion to adjourn was then made and carried.

W. S. RANKIN, *Secretary.*

## Special Report of Secretary on Visit to Canal Zone

July 30, 1913.

DR. J. HOWELL WAY, *President,*  
*North Carolina State Board of Health, Waynesville, N. C.*

DEAR DR. WAY:—In accordance with the action of the State Board of Health at Morehead City, June 18, 1913, directing the Secretary to visit the Canal Zone for the purpose of studying health work, especially the anti-malarial work of that country, I beg to report as follows:

I left the State July 8th, arrived at New Orleans July 9th, sailing from there the same day on the United Fruit Company's steamship, Parismina, for Colon, Panama, where I arrived July 14th. I spent from July 14th to July 19th, five days, investigating health work in the Canal Zone; leaving Colon July 19th, arriving at New Orleans July 24th, I returned to Raleigh on July 25th.

### GENERAL CONSIDERATIONS.

In order to thoroughly appreciate the nature of the problem of sanitation in the Canal Zone it is necessary to take into consideration several facts of general importance.

The Canal Zone comprises an area of 436 square miles, and the country, therefore, is about as large as the average North Carolina county. When the Canal is completed about 95 square miles of this territory will be under water. The Canal Zone is located about 9 degrees north latitude and has a typical tropical climate, characterized by an equable temperature and high humidity. The temperature varies through the year practically between 75 and 85 degrees. The country has a rainy season extending from May through December—eight months; and a dry season extending from January through April. The rainfall on the Atlantic slope is about 180 inches and the rainfall on the Pacific slope is about 80 inches.

The total population of the Canal Zone, including the populations of the cities of Panama and Colon, is 146,510. While the cities of Panama and Colon are not parts of the Zone and are under the government of the Republic of Panama, the sanitary administration of these cities is under the Department of Sanitation of the Isthmian Canal Commission, and the mortality and morbidity reports, therefore, from the Canal Zone are based partly upon the population of these two cities. The population of the city of Panama is 47,657, of Colon 21,074. Deducting, therefore, the population of the two cities from the population of the Zone we find that in the Zone there are 79,279 people. Now, of the 79,279, 50,893 are employees. This fact is important in studying the mortality and morbidity reports because of the bearing of age and sex on death rates, it being evident that the proportion of children and very old people must be small as compared with the average country. Of the 50,893 employees, 38,340 are negroes, most of whom are from the West India Islands; the islands of Martinique and Jamaica furnish the largest number; the remainder of the employees, 12,553, are white. About half of the white employees are imported Spaniards and Italians and the other half are Americans. While there are in the Canal Zone, employed and

unemployed, 11,923 Americans, there are only 4,502 American women and children—another fact indicating the relatively small proportion of children to adults among the population, and the relative proportion of men to women.

#### HEALTH CONDITIONS.

In order for us to fully appreciate the present health conditions in the Canal Zone we must understand the situation before the influences now at work were called into operation. To that end I desire to incorporate as a part of this report a statement from Col. W. C. Gorgas, Chief Sanitary Officer of the Department of Sanitation, which he made some time ago before the Los Angeles Chamber of Commerce.

Says Col. Gorgas: "From 1520, the year in which the route across the Isthmus was first established, to 1820, when South America threw off the Spanish yoke, the Isthmus of Panama was the chief route of travel between the western coast of North and South America and Spain. Most of the travel to and from the Philippines also came and went by this route. During all this time a constant stream of Spaniards was always passing through Panama. These Spaniards, in general, unacclimated persons who had to remain some time waiting for vessels, paid a heavy toll to yellow fever, malarial fever and dysentery, the endemic diseases of Panama. As these travelers were often the highest officials of Spain their death caused wide comment throughout Europe and gave Panama the deservedly bad reputation which she obtained at this time.

"From 1820 to the discovery of gold in California, in 1849, the Isthmus was not so much used as a point of transit, but on the discovery of gold, unacclimated Anglo-Saxons by the thousands flocked to the Isthmus for passage to California. They suffered from the endemic diseases of the Isthmus just as did their predecessors, the Spaniards. The unsavory reputation of the Isthmus was still further enhanced. In 1853, the Fourth Infantry of the United States Army was sent from eastern United States to California. They went by way of the Isthmus of Panama. General Grant was at the time quartermaster of the regiment. The railroad was completed at this time only about half way across, so that the regiment had to march from Gorgona to Panama. From the time they left Colon to the time when they reached San Francisco they lost eighty men out of a strength of 810. The present railroad across the Isthmus was under construction from 1850 to 1855. During this period the mortality was so great that several times construction had to stop because the laboring force had died or were sick. No statistics were retained concerning this period, so we can judge of conditions only from individual instances. At one time the construction company imported 1,000 negroes from the West Coast of Africa, and within six months these had all died off. At another time, for the same reasons, they brought over 1,000 Chinamen and within six months these had died off. One of the stations, at present, on the Panama Railroad is named Matachin. The tradition is that this name is derived from the Spanish words *mata*, 'killed,' and *Chin*, 'Chinamen,' because this was the point where the thousand Chinamen were housed and where most of them died.

"During the period from 1881 to 1889, when the work on the French canal was at its maximum, unacclimated persons again came to the Isthmus in large numbers. The mortality among them was excessive. For this period it is again difficult to give accurate statistics. The French were building

their Canal through Columbian territory and they had no more police control of the adjacent country than a railroad contractor would have over the country through which his railroad passed if he were building a railroad in any one of the United States. We would simply know that Sam Smith was on his rolls and working for him on Wednesday and that on Thursday he was absent. Whether Smith had died or gone to work for some one else the contractor would have no means of finding out. This was the case with the French at Panama.

"They had a most excellent system of hospitals where the sick were well taken care of; and we have the well-kept records of these hospitals. They show that during the construction period of the old French company, from 1881 to 1889, 5,618 employees died in these hospitals. But the French were, at this time, doing their work by contract and each contractor was charged a dollar per day for each man he had in hospital. It will readily be understood, therefore, that if the French contractors were anything like the ordinary contractor, not a very large proportion of the sick would go to this hospital. We hear of many individual instances of heavy loss. The first French director, Mr. Dingler, came to the Isthmus with his wife and three children. At the end of the first six months all had died of yellow fever except himself. One of the French engineers, who was still on the Isthmus when we first arrived, stated that he came over with a party of seventeen young Frenchmen. In a month they had all died of yellow fever except himself. The superintendent of the railroad brought to the Isthmus his three sisters; within a month they had all died of yellow fever. The Mother Superior of the sisters nursing in Ancon Hospital told me that she had come out with twenty-four sisters. Within a few years twenty-one had died, the most of yellow fever. Many other instances of this kind could be cited.

"From the best information which I can get, and which I consider accurate, I believe the French lost 22,189 laborers by death from 1881 to 1889. This would give a rate of something over 240 per thousand per year. I think it due to the French to say that we could not have done a bit better than they, if we had known no more of the cause of these tropical diseases than they did.

"The great discoveries in tropical medicine made during the time between the coming of the French to the Isthmus and the coming of ourselves, however, namely that certain species of mosquito transmit both yellow fever and malarial fevers, has enabled us to protect ourselves against these and other tropical diseases.

"The French, with an average force of not more than 10,200 men, lost in nine years 22,189 men; we ourselves, with an average force of 33,000 men, in nearly the same length of time have lost less than 4,000. The death rate among the French employees was something more than 240 per thousand; our maximum rate in the early days was 40 per thousand; our rate at present is 7.50 per thousand. Malaria, from a maximum of 821 per thousand taken sick—*i. e.*, that, out of every thousand of our employees in the course of the year, we have 821 taken sick with malaria—we have reduced at present to 187 per thousand. But most important of all, yellow fever has been entirely banished. We have not had a single case since May, 1906, now a lapse of almost six years. The general death-rate has been reduced from a maximum of 49.94 per thousand to a rate, for the year 1910, of 21.18

per thousand. Such a rate compares favorably with that of many parts of the United States."

#### THE DEATH RATE.

For the year of 1912 for the Canal Zone, including the cities of Panama and Colon, was 20.49; the death rate for the population of the Canal Zone (79,279), excluding the cities of Panama and Colon, for 1912, was 14.24; the death rate among the 50,893 employees in the Canal Zone was 9.18, for 1912.

The principal causes of death among the employees and civil population of the Canal Zone, based on a study of the death rates for the last five years, are violence, diarrheal diseases under two years of age, malaria, and tuberculosis. If we exclude the civil population and consider only the employees we find that practically one-third of their deaths are due to violence, with no unusual amount of homicidal or suicidal deaths. The infantile death rate, which has for the last three years run about 75 per 100,000 of the population, as compared with the infantile death rate of the registration area of the United States, 100 per 100,000, in view of the relatively small infant population is very high.

The malarial death rate runs about 55 per 100,000 of the population, and is decreasing from year to year.

There are several points of interest in studying the health situation in Panama and Colon: In the first place it is interesting to know that the high death rate of these two cities is due to the same factors responsible for the high death rate in North Carolina, namely, tuberculosis and diarrheal diseases of children under two years of age. I may mention here the interesting fact that in the city of Panama, with a population of 47,000, there is not a single privy, and but four cess pools. Right here, too, is the place to set down the kindred fact that for the last five years the city of Panama has not averaged more than four deaths per year from typhoid fever. In the city of Panama they have a rigidly enforced law requiring that every building shall have a water-closet, a sink, and a bath-tub. The public water mains and sewer pipes traverse the entire city, and all houses are connected with the public water supply and sewer system.

#### HOUSING.

There seems to be a distinctive type of dwelling evolving in the Canal Zone especially suitable to the tropics. The houses built by Americans and under American supervision avoid gutters. Where a visitor sees an old house with gutters he may be sure that the gutters are punctured and do not hold water. The water drops directly from the eaves of the house to the ground, and around the more expensive dwellings into a shallow wide concrete basin. Another important phase of the building problem is thorough screening. The point is made by the sanitary authorities that a poorly screened house is probably worse than no screening at all, as such a house tends to admit mosquitoes and then prevents their leaving—acts as a mosquito trap. Of course, there are no fireplaces in the houses. All houses now constructed in the city of Panama, and I think in Colon, are required to be rat-proof so as to prevent the entrance and spread of plague. The rat-proof house is either built high off the ground, on stilts, and the sills and floor so constructed as to prevent the entrance of rats between the walls, or, if the house is built on the ground, as in the business part of the town, the

municipal ordinance requires that it shall have a cement floor at least three and one-half inches thick, and that the outside walls of the house shall extend at least twelve inches below the surface of the soil. Then if ceiling is put in on the first floor, that is to say the walls made double with an inner and outer layer of boards with an intervening space, their construction laws require that the first eighteen inches of space above the floor between the two walls, the weatherboarding and the ceiling, shall be filled with cement.

#### INTERESTING OBSERVATION OF THE MOSQUITO.

The Board will recall that while the purpose of my visit to the Canal Zone was to study health work in general, I was directed to give particular attention to the work of the Department of Sanitation directed against the mosquito.

The Canal Zone furnishes favorable conditions for the propagation of mosquitoes, and consequently we are not surprised to learn that of something like two hundred known varieties of mosquitoes one hundred and twenty-five varieties are known to exist in the Zone. Most of these are the harmless, non-biting mosquitoes, but there are found also not only the biting mosquitoes, mosquitoes that do not carry disease, but all of the important disease carriers, of which the two most important varieties are the anopheles and stegomyia.

It has been found that the stegomyia is in the strictest sense a domestic insect—that two conditions are essential for its propagation: First, an artificial container of stagnant or standing water; and, second, a near by *inhabited* house. The anopheles, on the other hand, is a semi-domestic insect, breeding in the swamps and visiting human habitations for, probably, most of its carnivorous diet, blood, which, so far as experiments go to show is absolutely necessary for the female in order that she may deposit eggs. This dietary condition seems to be the explanation of the persistence of the mosquito in her attempt to bite, as blood is essential to her generic functions, and, therefore, to the propagation of the species. The conditions under which the anopheles breed best are small collections of water heavily studded and impregnated with vegetation and the desolved juices of decaying vegetation. Water containing green fungus seems to offer especially favorable conditions for the propagation of the anopheles. There seems to be a close connection between the proportion of water and vegetation, which is an explanation of the fact that the anopheles mosquito is found breeding usually in small collections of stagnant water rather than in large ponds or lakes.

The culex mosquito, that is more of a nuisance and annoyance than a disease producer, is found to breed in both artificial containers and stagnant collections of ground water.

The usual teaching of text-books is that the disease producing mosquitoes fly but short distances. The Department of Sanitation has found that the anopheles travels sometimes from a mile to a mile and a half from his breeding place to his feeding place. This discovery was made in the following way: A man was stripped above his waist in a mosquito breeding swamp and the insects were allowed to cover his body, a mosquito bar was then placed over the man and a large number of the insects caught; they were then sprayed with an atomizer containing an indelible red dye and turned loose. The stained mosquitoes were found as far as a mile and a half from the place where they were caught and stained.

Another interesting observation on the flight of mosquitoes relates to the time of their flight. It is found that the mosquitoes, leaving their breeding place for their feeding place, and leaving their feeding place for their breeding place, leave respectively late in the afternoon and early in the morning, before the sun's rays become very bright, and that all the mosquitoes, leaving the breeding place or feeding place, leave within a very short time of each other. This observation was made in the following way: A number of men were placed around a mosquito breeding swamp and each man got a sky-line by crouching or lying down behind a box and looking over its edge. Insects crossing the sky-line or edge of the box could easily be seen and their direction determined. Now, it has been found by this method that the first mosquito leaving the swamp for a camp will cross the sky-line, say at 5:45 p. m., in two minutes three mosquitoes are seen crossing, and in ten minutes a perfect swarm, and in forty-five minutes the flight has entirely ceased. The return flight seems to be made in the same way.

Still another interesting observation in the flight of these insects is that with mosquito traps fastened in the transoms of the doors of the windward and leeward side of houses. The anopheles are caught on the windward side and the culex on the leeward side of the house.

#### METHODS OF MOSQUITO EXTERMINATION.

The method of election where finances and other conditions will permit is to fill up the mosquito breeding pools. Where this is not possible the next best method is to drain the stagnant water. If the amount of standing water is not too great the preferable method of training is subsoil tiling; where this is not practicable, the third method of preference is an open concrete drain; and, where finances will not permit concrete an ordinary open ditch is the last resort. I should call attention here to the type of ditches used in the tropics as compared with the type of ditch used in this State. A cross section of North Carolina ditches will give you a ditch shaped like a U with a flat bottom, and often the bottom is very much broader than is necessary for the stream of water, which allows a small, slow flowing stream to zigzag and form little eddies and pools along the course of the ditch—ideal conditions for anopheles breeding. The ditches used in the Canal Zone are on cross section V shaped, which brings the water into a more rapidly flowing stream in the center of the ditch.

Where filling in or drainage of some kind is not possible, the sanitary authorities are dependent, for the prevention of the mosquito, upon some form of oiling or the use of a larvacide. It is found that a cheap, crude oil, which is bought at the wholesale price of \$1.10 a barrel, gives a more continuous and tenacious scum than the more refined and costly oils. This oil is bought in large quantities and is used throughout the Zone, except in those places where larvacide is used. Larvacide is a mixture of crude carbolic acid, caustic soda, and powdered resin heated together for some time. The larvacide is found to kill mosquitoes in very dilute solution, and it is used in those places in the Zone where it is difficult to carry the larger quantities of oil that would be needed for mosquito destruction. The oil is applied to soggy places in the ground and on the pools by tanks with sprinklers fastened on cart wheels and pulled by mules where such a vehicle can get to the mosquito breeding places. The small collections of stagnant water not accessible to the above described vehicle are treated with oil or larvacide

by a laborer with an oil tank, holding from five to ten gallons, strapped on his back, to which tank there is attached a pump and spraying nozzle. Along many of the ditches garbage cans and barrels, with small openings into which a spigot is fastened, are found. The container is filled with oil and the spigot set so as to allow oil to drop continuously in such quantity as the amount of water running along under the barrel requires to keep it free from mosquitoes.

One is impressed with the great care and attention given to small collections of water in the Canal Zone that would probably be neglected or overlooked in this country. Mosquito experts of the Department of Sanitation have found that the anopheles would breed in exceedingly small, shallow pools, even in collections of water not over one-eighth or one-sixteenth of an inch in depth.

In addition to the work directed to the prevention of the mosquito by the destruction of his breeding place there are other important measures, which have proven very effective in keeping down malaria, directed to the destruction of the adult mosquito. Chief among these is thorough screening of the homes, and especially the sleeping quarters of large numbers of employees. The Sanitary Department recommends only eighteen mesh wire, as sixteen mesh will allow the passage of certain varieties of mosquites. Copper wire is used as a matter of economy, as steel or iron wire would soon rust. One is everywhere impressed with the attention to details in the sanitary work, and in no matter is this impression so strong as in the manner of screening the houses. The screening must be complete to be effective. The point is made that a poorly screened house may be worse than no screen at all, as it may admit mosquitoes and interfere with their leaving—acting thereby as a form of trap. The effectiveness of screening in reducing malaria has been very well demonstrated at Gatun. Gatun has a population of about 15,000 people, about half of the population live in screened quarters and the other half in unscreened quarters. There is two-thirds as much malaria among those living in unscreened quarters as among those living in screened quarters; indicating that screening reduces malarial incidence one-third. A trap on the order of a fly trap that fits in the place of the transoms over the doors is used to some advantage. Frequently one of these traps is found on one side of the house turned in, so as to catch mosquitoes attempting to enter the house, and on the other side of the house will be a trap turned out, so as to catch the mosquitoes leaving the house. Hence, "they get 'em goin' and comin'."

Another form of mosquito destruction that has been very effective is what is called the "hand catch" method. Ordinary laborers are equipped with small vials four and one-half inches deep and an inch wide containing a small bit of cotton in the bottom saturated with chloroform, and then with a bicycle lamp they go into the sleeping quarters of the employees (not in private homes), and by throwing the rays of the light in the dark corners, behind doors and on the walls that are usually shaded, they pick out the resting mosquito and carefully slip the open mouth of the vial over him, and so he is caught. In one of the camps over 22,000 mosquitoes were caught in this way within a week. About ten mosquitoes are caught by the "hand catch" method to one in the traps. About one-third of the mosquitoes caught are of the anopheles variety, and two-thirds of them are culices. The effectiveness of the "hand catch" method has been proven by the ability of the

authorities to hold down the malarial rate in temporary camps where it was not financially practicable to build permanent quarters or to screen. With this method alone the malarial rate in such camps has been held down, notwithstanding the abundant supply of mosquitoes to the average malarial incidence of the Zone.

The effectiveness of the warfare on the mosquito in the Canal Zone is shown by the complete eradication of the more easily controlled mosquito—the stegomyia—and the fact that there has been no case of yellow fever developing on the Zone since 1906, and in the reduction of the malarial rate ninety per cent.

**PRACTICAL CONCLUSIONS FROM MY INVESTIGATION OF THE HEALTH WORK IN THE CANAL ZONE.**

First. The mosquito problem and malarial problem are not interdependent; while the eradication of the mosquito will be associated with the disappearance of malaria, malaria can be remarkably reduced through prophylactic doses of quinine independently of mosquito extermination.

Second. The mosquito problem in North Carolina is far less complicated than the mosquito problem of the Canal Zone for three reasons: (1) It is a five months' instead of a twelve months annual problem; (2) the greater rainfall in the tropics causes a much larger proportion of the surface area to acquire mosquito breeding properties than the small rainfall would cause in North Carolina; and, (3) the more abundant and luxuriant growth of vegetation in the tropics prohibiting the evaporation and the drying up of collections of water and interfering with the flow of water through ditches makes the problem more complicated than would be the problem in North Carolina.

Third. Nevertheless, under present economic conditions in North Carolina, it is impracticable to endeavor to remove malaria through mosquito extermination in the rural districts, under which conditions we must rely upon prophylactic doses of quinine and disregard the mosquito. But in the majority of municipalities on account of the relative concentration of wealth and the small *per capita* occupied territory, mosquito extermination is financially feasible and should be carried out.

Fourth. In order to do this it is necessary that a thorough survey of mosquito breeding places in each municipality concerned be made, and that the destruction of such breeding places be carried out in a comprehensive, systematic, and complete way.

Fifth. Causes of high death rates in the Canal Zone, as in North Carolina, and for that matter throughout the world, seem to be two: tuberculosis and diarrheal diseases of infants. And in considering State policies in regard to other diseases, including malaria, we must keep ever in mind these two principal causes of excessive death rates.

Respectively submitted,

W. S. RANKIN,  
*Secretary.*

NOTE.—In arriving at these conclusions I have had the advantage of consultation with Dr. H. R. Carter, of the United States Public Health Service.

## Inspections of State Institutions

December 31, 1913.

*Chairman Board of Directors, State Hospital, Raleigh, N. C.*

MY DEAR SIR:—This is to report that I have this day inspected the State Hospital, located at Raleigh, as I am required to do by the State Laws, and that I found the institution in a clean and orderly condition.

Very respectfully yours,

W. S. RANKIN,  
*Secretary.*

December 31, 1913.

*Chairman Board of Directors, State Penitentiary, Raleigh, N. C.*

MY DEAR SIR:—This is to say that I have this day inspected the State Penitentiary, located at Raleigh, and found the condition of the building sanitary.

A matter that concerns me very much in the management of prisoners is the handling of the tuberculous prisoners. I have discussed this matter with Superintendent Mann whom, I think, has made some valuable suggestions to me in connection therewith. Within the next two or three months I propose to investigate the practice of other States in regard to managing the tubercular prisoners and will have a special report on this phase of the institutional work to make to you.

Very respectfully yours,

W. S. RANKIN,  
*Secretary.*

December 31, 1913.

*Chairman Board of Directors, North Carolina School for the Colored Deaf and Blind, Raleigh, N. C.*

MY DEAR SIR:—I have this day inspected your institution located here in Raleigh and found it to be in a sanitary condition.

The three cases of typhoid fever that have occurred in the institution during the fall do not appear to be due to local causes for which the management is in any way responsible, and from whatever source the cases came it is certain that the source of the disease was temporary and that it no longer exists.

Very respectfully yours,

W. S. RANKIN,  
*Secretary.*

December 31, 1913.

*Chairman Board of Directors, State School for the Blind, Raleigh, N. C.*

MY DEAR SIR:—This is to say that I have this day inspected your institution located here in Raleigh and found that its sanitary condition warrants our approval. In saying this we are cognizant of the fact that it is practically impossible to keep an institution for the blind as cleanly and as orderly as an institution the occupants of which are naturally endowed with a finer appreciation of cleanliness.

Very respectfully yours.

W. S. RANKIN,  
*Secretary.*

December 31, 1913.

*Chairman Board of Directors, Old Soldiers' Home, Raleigh, N. C.*

MY DEAR SIR:—This is to say that I have this day inspected the Old Soldiers' Home as I am required to do by the State law. I wish to preface, as I have heretofore, the opinion of this Board as to the condition of the Old Soldiers' Home with this statement: That we recognize the temporary nature of the institution; that we recognize the fixed habits of its inmates and the practical impossibility of changing habits that have become fixed to a considerable extent by a life of from sixty to seventy years, and that we recognize also that many of the inmates have had alcoholic habits before entering the institution. Taking all these facts into consideration and being cognizant, as we are, of several sanitary errors in the construction of the Home and of considerable carelessness in the use of the toilets we are, nevertheless, constrained to give your Board our approval of the sanitary conditions obtaining in the institution.

Very respectfully yours,

W. S. RANKIN,  
*Secretary.*

July 22, 1914.

*CAPT. J. S. MANN, Superintendent State Penitentiary, Raleigh, N. C.*

MY DEAR CAPT. MANN:—Pursuant to my statement to you last week following the inspection of the convict camp at Whitney, I am writing to say the idea suggested from the visit to the convict camp is that some comprehensive plan for camp sanitation be carefully and fully developed by this office for the guidance of those in charge of such camps.

We are now at work on such a plan which we hope, through consultation with you, will embody, when completed, both the ideas of your Board of Directors and the State Board of Health for the care of the convicts.

One feature of the plan under consideration is that it shall permit the use of score cards and the numerical grading of convict camps of both State and county, somewhat after the manner of the score card grading of dairies.

It will require ten days or two weeks to work out such a scheme of sanitation as that contemplated. It will be necessary to consult with an architect in regard to the construction of proper and suitable quarters for housing convicts. The plan must necessarily embody the fundamental principles of sanitation adjusted, as far as possible, to the economical considerations involved in temporary camp structure.

While we are at work on this system of camp sanitation, there are certain changes in the sanitary care of the convicts at Whitney which should be made at once. Urgent changes which should be proceeded with and which will enter into the above scheme of camp sanitation are:

(a) Extermination of vermin: This is to be accomplished by carefully closing, as far as possible, with good strong wrapping paper, paste, and tacks the openings of all sleeping quarters of both guards and convicts on the same day, and in burning in these closed quarters ten pounds of sulphur for every one thousand cubic feet of air space. The term, all openings, include inspection holes, large knot holes, and fire places. The sulphur is to be burned in the following way: A sufficient number of iron pots, preferable of the deep skillet type, are to contain the sulphur necessary for the cubic air space, and are to be placed in a wash tub on a table with sufficient water about

the skillet to prevent the burning sulphur in the skillet from igniting the wood on which it sits through the heat generated. In the center of the sulphur in the skillet is to be placed a piece of cotton saturated with wood alcohol or kerosene oil which is to be ignited and the room closed. The room with the sulphur fumes remains closed at least twelve hours. In the evening of this same day and before any of the convicts have entered the quarters fumigated, and after they have had their supper they are to remove their clothes, throwing the soiled clothes into boiling water, and after taking a bath and greasing their hair with equal parts of kerosene and olive oil, and all other hairy portions of the body with equal parts of lanoline and mercurial ointment, put on clean suits that have been subjected to fumigation by the above described method in one of the guard's rooms the day before. The convicts must be allowed to wash the oil and ointment from their bodies on the following morning. The kitchen should be subjected to sulphur fumigation the following night. All the old worm-eaten bed-slats should be removed from the sleeping quarters and burned following and not preceding the fumigation. The inside of the sleeping quarters should be whitewashed the day following the fumigation. The whitewash will help get rid of vermin and at the same time allow more light in the sleeping quarters. The important point to remember is that thoroughness is essential; 99 per cent perfect won't do, as the 1 per cent remaining will, through their prolific and rapid reproduction, reinfest the quarters.

(b) Ventilation must be improved. The standard cubic feet air space for adults is 600 cubic feet. The quarters at Whitney for the negro convicts supply only about 250 or 300 cubic feet; for the white about 450 cubic feet. The requisite amount of air space can be secured by doubling, and, if possible, tripling the existing window space in the sleeping quarters, and by not obstructing any of this space by putting in windows. This arrangement will permit of excellent ventilation, in fact provide open air sleeping until cold weather in the fall and winter, when additional arrangements which will be incorporated in the general scheme of camp sanitation on which we are at present at work will be necessary. This additional arrangement will take the form of a sitting room for the convicts. Such a sitting room will be used for dressing and undressing and for two or three hours a day. It can be constructed with about 250 cubic feet of air for every convict. Of course, the only stove that will be needed in the camp will be in the sitting room. At present at Whitney, the immediate need is enlargement of the window space and screens in the sleeping quarters, both for window spaces and doors and all other openings through which flies and mosquitoes may enter. The screens should be eighteen-inch mesh, and it will be found that copper wire in the end is most economical. It is more economical to screen than not to screen. Proof: Take the number of days lost by malaria of the convicts employed at Whitney and multiply this number by \$1.75, and you will get the cost to the camp of malaria, and find that this cost is far in excess of the cost of screening. The camps should be so constructed in the future as to exclude flies and mosquitoes. I might say here that the malarial mosquito is a nocturnal insect, and if he can be excluded from the sleeping quarters, he will not be able to carry the disease. The scheme of camp sanitation on which we are at work will include architects plans for temporary camp housing. But in the meantime the enlargement of window space and the screening of camps at Whitney should go on.

(c) Proper sewage disposal should be provided. I am sending you by tomorrow's mail a cut of a sanitary closet which should be placed on grounds as far from water supplies as space will permit, and on lower level than the water supply. For the use of convicts at night, when they cannot leave the sleeping quarters, I recommend that you secure a sufficient number, I suppose one per room, of the sanitary closet pails manufactured by the National Closet Company, Sanford, N. C. The Company, I think, for the advertising it will give them will be willing to supply these pails to you at actual cost. A box of dirt and ashes should be kept beside the pails, and convicts using pail at night should be required to throw in a sufficient amount of dirt and ashes. There will be little, if any, odor with this system. Some of the convicts should have as their duty the care of these pails and privy, the description of which follows tomorrow.

(d) The fourth recommendation which I wish to make is that benches be provided at the tables on which meals of the convicts are served.

Lastly, I wish to suggest that you have Warden Sales call on me at this office so that I can go over with him and explain to him more fully the recommendations in this letter and that you then have Warden Sales visit Whitney camp for the purpose of supervising the changes recommended, more especially to have all the camps properly fumigated; moreover, I recommend that after Warden Sales has carried out these measures herein recommended for the Whitney camp, he visit all other camps for the purpose of instituting similar sanitary changes wherever he may find they are needed. Warden Sales' experience as a sanitary officer should be of great advantage in sanitating the camps.

I shall make a personal inspection of all convict camps within the next three or four weeks, and I hope by the time that I shall reach these camps these recommendations will have been acted upon.

With kindest personal regards, I am

Yours sincerely,

W. S. RANKIN,  
*Secretary.*

Carbons to:

COL. H. B. VARNER, *President Board of Directors, Lexington, N. C.*  
GOVERNOR LOCKE CRAIG, Asheville, N. C.

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July 23, 1914.

CAPT. J. S. MANN, *Superintendent State Penitentiary, Raleigh, N. C.*

MY DEAR CAPT. MANN:—Pursuant to my letter of yesterday, I am herewith inclosing blue print of a sanitary privy for convict camps. The blue print, I think, makes the construction of this closet sufficiently clear for camp work. It should be so constructed and of such size as to permit of ready removal. The most important point about its construction is that it must be fly proof. It is especially important that this point be carefully looked after in the construction of the open flap in the back of the privy through which dirt is to be shoveled, a little every morning until the excrement of the preceding day is covered and eventually the pit filled. Careful attention to these points will help in securing a good score on the next inspection, when each camp will be numerically rated.

Another matter which I neglected to call your attention to in my letter of yesterday. New convicts, on entering the camp, should throw their old

clothes in boiling water, take a hot bath, anoint the head with equal parts of kerosene and olive oil, and all hairy parts of the body with a mixture of equal parts of lanoline and mercurial ointment, oil and ointment to be washed off on the following morning. The bath and removal of clothes should take place outside of the sleeping quarters for obvious reasons.

Once the camp is thoroughly cleared of vermin, it cannot get back unless it be carried in from the outside by some person, either new prisoners or guards.

Very truly yours,

W. S. RANKIN,

*Secretary.*

Copy to:

COL. H. B. VARNER, *President Board Directors, Lexington, N. C.*

GOVERNOR LOCKE CRAIG, *Asheville, N. C.*

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September 30, 1914.

MR. I. I. DAVIS, *Chairman of the Board of Directors, State Hospital, Morganton, N. C.*

MY DEAR MR. DAVIS:—Under the requirements of section 3, chapter 62, Public Laws of 1911, I beg to report that I made an inspection of the hospital at Morganton on August 15th and found, as in all my previous inspections, the institution to be in excellent sanitary condition. And my statement applies to both buildings and grounds.

Nature has done everything possible to make your institution sanitary and beautiful and to the natural advantages the present management seems to have added such artificial improvements as considerations of taste and economy would sanction.

Yours very truly,

W. S. RANKIN,

*Secretary.*

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September 30, 1914.

MR. A. C. MILLER, *Chairman Executive Committee, Board of Directors, North Carolina School for the Deaf and Dumb, Shelby, N. C.*

MY DEAR MR. MILLER:—In accordance with section 3, chapter 62, Public Laws of 1911 as amended, I have the honor to report that I made an inspection of the school at Morganton on August 15th and found both buildings and grounds, as I have found them on previous inspections, in excellent sanitary condition.

From my point of view it would appear that you have a thoroughly efficient man in charge of this institution.

Yours very truly,

W. S. RANKIN,

*Secretary.*

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December 15, 1914.

COL. JOSEPH E. POGUE, *Chairman, Board of Directors, State School for the Blind, Raleigh, N. C.*

MY DEAR COL. POGUE:—I have this day made an inspection of the State School for the Blind and find the buildings and grounds in an orderly and sanitary condition.

Yours very truly,

W. S. RANKIN,

*Secretary.*

December 16, 1914.

COL. A. B. ANDREWS, *Chairman, Board of Directors, Old Soldiers' Home, Raleigh, N. C.*

MY DEAR COL. ANDREWS:—I have this day made an inspection of the Old Soldiers' Home. In a general way I found the institution in a fairly sanitary condition—apparently more orderly and sanitary than at any previous inspection. I did find, however, two conditions which I think call for remedy.

The first of these conditions is an imperfect washing of the dining room dishes. I found the knives and forks on the dining room table visibly clean, but greasy to the touch. The dishes should be more thoroughly washed.

The second condition which I desire to criticize is the existence of bed bugs in the institution. I know that the buildings are old and so loosely constructed as to predispose to the existence of bugs. Another condition which renders it somewhat difficult to get rid of vermin is the absence of an institutional laundry. The washing has to be sent out and it would be almost impossible to prevent the reintroduction of vermin even if this pest was thoroughly removed from the institution. The removal of vermin from the Old Soldiers' Home will be a difficult matter on account of the fact that hydrocyanic acid fumigation could not very well be carried out because of the loose structure of the buildings.

I do think, however, that while the removal of vermin from the Old Soldiers' Home is more difficult than under average domestic conditions that it is neither impossible nor impracticable, and I recommend that your Board instruct the physician of the Old Soldiers' Home that he must institute the proper measures for the removal of bed bugs and that this must be done promptly.

Yours very truly,

W. S. RANKIN,  
*Secretary.*

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December 17, 1914.

COL. JOSEPH E. POGUE, *Chairman, Board of Directors, North Carolina School for the Colored Deaf and Blind, Raleigh, N. C.*

MY DEAR SIR:—In accordance with section 3, chapter 62, Public Laws of 1911, I have this day made an inspection of the State School for the Colored Deaf and Blind located in Raleigh and find it in an orderly and sanitary condition.

Yours very truly,

W. S. RANKIN,  
*Secretary.*

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December 23, 1914.

MR. D. E. MCKINNE, *President Board of Directors, State Hospital at Goldsboro, Princeton, N. C.*

MY DEAR SIR:—In accordance with section 3, chapter 62, public laws of 1911, I inspected the State Hospital at Goldsboro on December 21st, and found the institution in an orderly and sanitary condition.

Very truly yours,

W. S. RANKIN,  
*Secretary.*

## Opinions of the Attorney-General

June 4, 1913.

HON. T. W. BICKETT, *Attorney-General, Raleigh, N. C.*

DEAR SIR:—In connection with the question of the introduction of an improved or more adequate system of water supply for the city of Raleigh, a question of the duties of this Board has arisen. In pursuance of section 21, chapter 62, Public Laws of 1913, the city of Raleigh, through their Engineer, have submitted outlines of their proposed plans in regard to constructing an impounding reservoir on what is known as Walnut Creek, with the request that this Board grant its approval to these plans. Upon examination it appears that there is a very grave question as to whether or not this is the most appropriate source of supply.

In view of the fact that as a civil engineer I am employed by this Board, among other things, to examine into proposed plans for water works and sewerage and to advise the Board relative to the same, and in view of the further fact that one member of this Board is required by law to be a sanitary engineer, I did not think it wise for this Board to give its approval to plans knowing that there is considerable question among engineers who have given the appropriateness of the present proposed source of supply even a superficial study in connection with examinations of the water works for other purposes, and feeling further that this Board might be open to serious criticism if subsequent developments should show that this Board gave its approval to certain plans for impounding and filtration without first calling special attention to the question of the most appropriate source of supply, which might have forestalled large unnecessary financial or other losses, particularly when this Board is required by law to consult with and advise as to the most *appropriate* source of supply, I have accordingly written a letter to the Mayor and Commissioners of Raleigh, copy of which I am enclosing.

I shall thank you to advise me as to whether, in your opinion, I am right in calling attention to the matter of the most appropriate source of supply; also whether in your opinion this Board can or should require some form of examination of the various possible sources of supply for the city of Raleigh with a view of securing for the city a more appropriate source of supply, as well as relieving this Board of any possible criticism, as outlined above.

What action or course of procedure would you recommend to this Board with reference to the present plans already submitted, should the Board be of the opinion that the pursuance of these plans might endanger the quality of the water supplied to the citizens of Raleigh, and also in view of the fact that it is currently rumored that it is contemplated to make further improvements or alterations in the method of filtration?

Respectfully yours,

W. H. BOOKER,  
*Assistant Secretary.*

June 4, 1913.

MR. W. H. BOOKER, *Assistant Secretary State Board of Health, Raleigh, N. C.*

DEAR SIR:—Replying to your inquiry of this date, in re plans of the city of Raleigh for certain additions to its system of water works, I beg to advise that it seems to me that it would be proper for the State Board of Health to request the city to have its engineer attach to his report to the city a statement as to the relative value, considered as an economic proposition, of Walnut Creek, Crabtree Creek, and Neuse River as sources of supply. This statement should be as full as possible to the end that the Board of Health may be in the possession of accurate information in determining whether or not Walnut Creek is an appropriate source of supply. When you have received this statement you can then determine whether or not you ought to approve the plans proposed by the city.

Very truly yours,

T. W. BICKETT,  
*Attorney-General.*

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June 23, 1913.

HON. T. W. BICKETT, *Attorney-General, Raleigh, N. C.*

DEAR MR. BICKETT:—I have been requested by several health officials to get a written opinion from you on the effect of chapter 181, Laws of 1913, particularly the repealing section, that is, section 15 of the said chapter, on the term of service of a county superintendent of health elected under the provisions of section 9, chapter 62, Public Laws of 1911. I have stated to those inquiring about this matter that there was no doubt in my mind that a superintendent of health elected under section 9, chapter 62, would lose his office on the first Monday in July, and that the election under section 9, chapter 62, although that section states that the superintendent would be elected for two years, would be invalid after the first Monday in July.

The question, therefore, that I want you to rule on is: Can a county superintendent of health elected as provided for in section 9, chapter 62, Public Laws of 1911, hold his office after the first Monday in July, 1913?

Thanking you in advance for this kindness, I am

Yours sincerely,

W. S. RANKIN,  
*Secretary.*

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June 24, 1913.

DR. W. S. RANKIN, *Secretary State Board of Health, Raleigh, N. C.*

DEAR SIR:—Replying to yours of June 23d, I beg to advise that by virtue of section 1, of chapter 181 of the Act of 1913 it is the duty of the Board of Health, in every county in the State, to meet on the first Monday of July of this year, and elect a county physician or a county health officer who shall serve until the second Monday in January, 1915, when his successor shall be elected for a term of two years.

It will be observed that the first sentence in the section named amends the Act of 1911 and section 15 repeals all laws and clauses of laws in conflict with chapter 181. Under the old doctrine, of *Hoke v. Henderson*, chapter 181, in so far as it interferes with an election of county superintendents of health, who were elected in January of this year, for a term of two years,

could not be upheld. But the Supreme Court of North Carolina, in the case of *Mial v. Ellington*, 134 N. C., 131, expressly overrules the doctrine as enunciated in *Hoke v. Henderson*, and holds that an officer appointed for a definite time to a legislative office has no vested property or contract right thereto, and that the people, through their representatives in the General Assembly can alter, change the tenure, the business or emoluments of the office and deal with the office as public policy may suggest, and public interest may demand.

In the case under consideration the General Assembly has seen fit to provide that all health officers, regardless of the time when they were elected, shall be elected on the first Monday of July in this year, and the legislative will must be obeyed.

Very truly yours,

T. W. BICKETT,  
*Attorney-General.*

November 25, 1913.

HON. T. W. BICKETT, *Attorney-General, Raleigh, N. C.*

MY DEAR MR. BICKETT:—I am writing to ask your official opinion as to whether or not county commissioners have a right to appropriate county funds for the support, in our State Sanatorium, of needy, deserving consumptives.

Very truly yours,

W. S. RANKIN,  
*Secretary.*

December 4, 1913.

DR. W. S. RANKIN, *Secretary State Board of Health, Raleigh, N. C.*

DEAR SIR:—Your favor of November 25th asking whether or not the County Commissioners have a right to appropriate county funds for the support in the State Sanatorium, of needy, deserving consumptives has been under consideration.

In reply thereto I beg to say that the powers of County Commissioners are limited strictly to those conferred by statute, and therefore they have no authority under the law to appropriate county funds for the purpose suggested.

Very truly yours,

T. H. CALVERT,  
*Assistant Attorney-General.*

May 12, 1914.

HON. T. W. BICKETT, *Attorney-General, Raleigh, N. C.*

MY DEAR MR. BICKETT:—I enclose herewith copy of a letter from Mr. Clark Finger, Treasurer of Gaston County, who wishes to know if it is necessary or if the law requires that the county commissioners shall approve the certifications of the State Registrar to the county treasurer of amounts due local registrars for their official work, before payment is made by the county.

The section of law bearing on this question you will find in chapter 109, section 19.

Thanking you in advance for your ruling, I am

Yours very truly,

W. S. RANKIN,  
*Secretary.*

May 15, 1914.

Dr. W. S. RANKIN, *Secretary State Board of Health, Raleigh, N. C.*

DEAR SIR:—The inquiry asking if the law requires that the county commissioners shall approve the certifications of the State Registrar to the county treasurer of amounts due local registrars for their official work before payment is made by the county, has been under consideration. The question arises under chapter 109 of the Public Laws of 1913, section 19, which provides in part, "All amounts payable to a local registrar under the provisions of this section shall be paid by the treasurer of the county in which the registration district is located, upon certification by the State registrar. And the State Registrar shall certify every three months to the treasurer of the several counties the number of births and deaths properly registered with the names of the local registrars and the amounts due each at the rates fixed herein."

Section 1385 of the Revisal of 1905 provides for the auditing by the board of county commissioners of accounts, and section 1404 provides, "It shall not be lawful for the county treasurer to pay a claim against the county unless the same shall have been audited and allowed by the board of commissioners."

These sections of the general law govern the conduct of the county commissioners and of the county treasurer in the auditing and payment of claims against the county, and we are of the opinion that section 19 above referred to should be construed in connection with sections 1385 and 1404. To do otherwise might embarrass the county officers in their method of keeping the county accounts and would probably require a change in the system of bookkeeping, and we cannot assume that the Legislature intended to bring about this change in the system unless this intention had been more clearly expressed. It would seem, however, that the county commissioners in auditing such accounts should accept the certificate of the State Registrar conclusive of the amount due unless a different rate of compensation has been agreed upon between the Chairman of the Board and the local registrars as provided for in the proviso of section 19.

Very truly yours,

T. H. CALVERT,  
*Assistant Attorney-General.*

ERRATUM  
PAGE 165, under "Credit," should be inserted the following:  
Unexpended fund for library.....\$100.00

May 18, 1914.

MR. T. H. CALVERT, *Assistant to Attorney-General, Raleigh, N. C.*

DEAR MR. CALVERT:—Your letter of May 15 giving your opinion in regard to the authority of county commissioners to refuse payment to local registrars on certifications by the State Registrar of the number of certificates filed with the State Registrar, as provided for in section 19, chapter 109, Laws of 1913, is received.

Now, I have no objection to the county commissioners approving the certifications of the State Registrar before the local registrars are paid, but it seems to me that your ruling would allow any board of county commissioners to set aside the operations of the Vital Statistics Law if they choose to do so, by refusing to approve the certifications of the State Registrar of work done by the local registrars.

I think the Vital Statistics Law, passed since the laws of the Revisal of 1905 and carrying, as chapter 109 does, a repealing clause, sets aside the older laws.

I want to forestall any board of county commissioners setting aside the operation of the State law by refusing to approve the amounts against the county treasurer as certified from this office.

I would be glad to hear from you further in regard to this matter before taking up the question further with the Treasurer of Gaston County.

Very truly yours,

W. S. RANKIN,

*Secretary.*

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May 28, 1914.

MR. T. W. BICKETT, *Attorney-General, Raleigh, N. C.*

My DEAR MR. BICKETT:—There has arisen between the State Board of Health on the one hand and the State Treasurer and State Auditor on the other hand, a difference of opinion as to the construction of the State Laws making appropriations for the State Laboratory of Hygiene.

It is contended by the State Treasurer and State Auditor that section 14, together with section 15, chapter 181, Laws of 1913, repeals the appropriation provisions of section 36, chapter 62, Laws of 1911.

Now, it is our contention that the *additional* appropriation provided for the State Laboratory of Hygiene in section 14, chapter 181, Laws of 1913, is not in conflict with the *special* appropriation for the Laboratory of Hygiene provided in section 36, chapter 62, Laws of 1911, and is, therefore, *not* repealed by section 15, chapter 181, Laws of 1913.

The Board of Health begs to call your special attention to the fact that section 14, chapter 181, Laws of 1913, does not amend the entire chapter 62 Laws of 1911, but amends *only* section 38 of said chapter and in no wise affects section 36 of the said chapter.

It may not be out of place for me to call your attention to the fact that if the Treasurer and Auditor are correct in their construction of the law, which would mean the loss of \$4,000 out of an \$8,500 appropriation for the State Laboratory of Hygiene, that the Laboratory would be closed immediately. Your opinion on this matter will be vital to the State Board of Health and to the interests that they represent.

Very respectfully yours,

W. S. RANKIN,

*Secretary.*

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June 17, 1914.

DR. W. S. RANKIN, *Secretary State Board of Health, Raleigh, N. C.*

DEAR SIR:—I beg to enclose herewith copy of letter written this day to the State Treasurer on the matter of appropriations for the support of the State Laboratory of Hygiene.

Very truly yours,

T. W. BICKETT,

*Attorney-General.*

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June 17, 1914.

HON. B. R. LACY, *State Treasurer, Raleigh, N. C.*

DEAR SIR:—The question referred to this department asking for a construction of the laws making appropriations for the State Board of Health,

and especially the part thereof for the use of the State Laboratory of Hygiene, has been under consideration.

The question arises on the effect of section 14 of chapter 181 of the Public Laws of 1913, as amending section 38 of chapter 62 of the Public Laws of 1911. Section 36 of the Act of 1911 establishes the State Laboratory of Hygiene and makes an appropriation for its support, and section 38 makes further appropriation "for carrying out the provisions of this act." Chapter 181 of the Laws of 1913, does not purport to be a substitute for chapter 62 of the Laws of 1911, but merely amends particular sections thereof. Section 14 of the Act of 1913 provides "That section 38, chapter 62, Public Laws of one thousand nine hundred and eleven, be, and the same is hereby amended to read as follows: 'For the purpose of deciding the question under consideration the Act of 1911 may be understood as having effect except that section 38 is substituted by the provisions of section 14 of the act of 1913. There is nothing in the Act of 1913 repealing in terms the appropriation contained in section 36 of the Act of 1911.'"

I therefore beg to advise that the appropriation contained in section 36 of the Act of 1911 may be understood as still in force in addition to the appropriations in section 38 of that act as amended by section 14 of the Act of 1913.

Very truly yours,  
T. H. CALVERT,  
*Assistant Attorney-General.*

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June 18, 1914.

HON. T. W. BICKETT, *Attorney-General, Raleigh, N. C.*

MY DEAR MR. BICKETT:—Your letter of June 17th enclosing copy of letter under same date to Hon. B. R. Lacy, State Treasurer, is received and your position in this matter is sincerely appreciated by

Yours truly,  
W. S. RANKIN,  
*Secretary.*

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July 2, 1914.

HON. T. W. BICKETT, *Attorney General, Raleigh, N. C.*

MY DEAR MR. BICKETT:—The State Board of Health, at its recent annual meeting, authorized that the Secretary of the State Board of Health should receive \$600 additional salary per year if, in your opinion, section 2, chapter 15, Laws of 1913, amending section 20, chapter 109, Laws of 1911, was not in conflict with section 4, Chapter 793, Laws of 1909, and permitted the payment of a part of the funds paid to the office of the State Registrar as created in section 2, chapter 109, Laws of 1911, for the transcripts of birth and death certificates to the said Registrar for this special service to the United States Government, it being clearly understood that the additional funds paid the State Registrar were to come out of the Federal Treasury and not the State Treasury.

I am writing, therefore, to ask if in your opinion such payment not exceeding one cent for each transcript, as provided in the above cited law, and not exceeding \$50 per month, can be made to the said Registrar for this service.

Very truly yours,  
W. S. RANKIN,  
*Secretary.*

July 3, 1914.

DR. W. S. RANKIN, *Secretary State Board of Health, Raleigh, N. C.*

MY DEAR SIR:—I am in receipt of yours of July 2d, calling my attention to the amendment to section 20, chapter 109 of the Laws of 1911 by section 2, chapter 15, Laws of 1913. I think under this amendment it will be entirely lawful for the State Board of Health to authorize you to receive for your own benefit any compensation for services rendered to the United States Government a fee not exceeding one cent for each transcript furnished the Government and not exceeding \$50 per month. This will be paid by the United States Government and the Act of 1913 contemplates that you should be paid for these special services to the extent approved by the State Board of Health.

Very truly yours,

T. W. BICKETT,  
*Attorney-General.*

## Report of The State Laboratory of Hygiene

The past two years show continued growth in the work of the State Laboratory of Hygiene, both along the old lines and in the new work which the Laboratory has been enabled to take up, viz.: the manufacture and free distribution of typhoid vaccine.

The Bureau of Vital Statistics estimates that during the past five years there have been in the State an average of 13,404 cases of typhoid, with 1,340 deaths each year.

In the year ending November 30, 1914, 116,606 doses of typhoid vaccine were distributed, enough to immunize 38,868 persons. The lowest retail price of typhoid vaccine is fifty cents per dose, and \$58,303 worth of vaccine was therefore sent out from the Laboratory in twelve months. But it is not in money value of the vaccine alone that the good of this work should be estimated. Careful and extensive statistics in the U. S. Army and elsewhere have shown that vaccination against typhoid fever is even more efficient than vaccination against smallpox. We have been reared in a land where typhoid fever like tuberculosis is endemic and long association has blunted our horror. It is only when the totals are read that we realize that typhoid fever is perhaps as prevalent in North Carolina as yellow fever once was in Cuba. Nevertheless it is not too much to hope—in fact it is almost assured—that in a few years typhoid fever will be as rare in North Carolina as smallpox is now.

In the distribution of diphtheria antitoxin the Laboratory can again reduce results to dollars and cents though the figures do not by any means represent all the saving accomplished. Other manufacturers have reduced the price of diphtheria antitoxin in many cases, though not in all. Since 1912 we have distributed annually an average of 10,000,000 units of guaranteed diphtheria antitoxin at approximately one-fourth its former cost and saved annually to the State about \$15,000. However a much greater saving can be accomplished by the State engaging in the manufacture of its own antitoxin.

During the years 1913 and 1914, 488 persons were given the Pasteur treatment for hydrophobia, and 680 heads of animals were examined and of these 348 were found to be those of rabid animals. The 488 persons paid \$932.50 for treatment or an average of \$1.91 per patient. At the lowest estimate these patients were saved at least \$100 by being able to take this treatment in the State. The aggregate saving would therefore be \$24,400 per annum.

The clear annual saving to the State by the work which we have outlined may be summed up as follows:

Typhoid vaccine .....	\$58,303
Diphtheria antitoxin .....	15,000
Pasteur antirabic treatment.....	24,400
Total .....	\$97,703

We have still to refer to the original and very important phase of the Laboratory work, and that is the examination of specimens. In the years ending November 30, 1913 and 1914, respectively, there were examined specimens as follows.

	1913	1914
Diphtheria .....	613	757
Sputum .....	1,262	1,552
Widal (typhoid) .....	1,018	1,357
Rabies .....	314	378
Malaria .....	269	379
Gonococci .....	88	116
Urine .....	92	167
Tumors .....	28	47
Miscellaneous .....	36	33
*Feces .....	3,266	1,671
Water .....	2,838	2,948
	<hr/>	<hr/>
	9,824	9,405

With the exception of urine (\$1) and tumors (\$5) these examinations are made entirely without charge and any physician in the State can secure this free diagnostic aid for his patients.

In regard to the examinations of water the majority of them represent analyses of municipal supplies and commercial bottled waters. The State law requires a monthly examination of each of these waters and there are 83 public water companies and 33 commercial bottled waters in the State.

The Laboratory examination of water involves many separate bacteriological and chemical tests as there is no simple means of classification between bad and good water. More than two-thirds of the public water companies of the State use as the source of supply a surface stream. Such a supply usually requires a system of filtration supplemented by dosage with certain chemicals. This method is efficient and harmless when properly managed but many problems arise which are comparatively new and inadequately treated in the literature on water analyses. The Laboratory has long wanted to take up some special investigations on this subject and finally we began in November, 1914, a special series of daily analyses of raw and filtered waters. It will take a number of months to complete this work but we feel sure that it will result in benefit to both the water companies and to the Laboratory. The water companies and springs paid an annual tax which aggregated \$4,696.94 in the year ending November 30, 1913, and \$5,119.19 in the following year. The fees for examinations of urine and tumors and a few paid water analyses amounts to about \$700 annually. All the other work in the Laboratory is done on an annual appropriation of \$8,000. As we have shown, the Laboratory effects an annual saving to the State of nearly \$98,000 on this investment.

The plans for the future include the manufacture of the various antitoxins, vaccines and curative sera as they can with advantage be taken up.

Respectfully submitted,

CLARENCE A. SHORE,  
Director.

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\*The apparent decrease in specimens offered is due to the fact that the Laboratory formerly examined specimens for the Rockefeller Hookworm Commission. This was discontinued during 1913.

## Report of the Hookworm Commission

By practical demonstration dispensary campaigns have proven to be the most successful way of bringing our work to the people. This method was followed actively during 1913. In forty counties 104,607 people were examined by the field staff. These examinations revealed 22,738 infections and 21,937 of these people received a total of 54,509 treatments, an average of nearly  $2\frac{1}{2}$  treatments per person.

These figures are somewhat lower, as a whole, than those of the preceding year. They represent, moreover, work done in a great measure in those sections of the State where infection was light, and in other sections where population was scattering and transportation difficult. They are evidence, however, of a high degree of zeal, energy and resourcefulness upon the part of the field men.

In order to accomplish this work eleven field men were employed, although not more than six were at work at any given time. In addition to the personal contact of the field men the work was aided materially through lectures attended by over 7,000 people. More than 200 teachers were reached and 5,000 letters and pamphlets were put into their hands; 120 papers were given over 300 articles, and 190,000 pieces of literature of all kinds were placed in the hands of those visiting dispensaries. Two of the forty counties had second campaigns and one county, Guilford, was worked by its own health officer.

In 1914 eight first campaigns and five second campaigns furnished 25,129 examinations. In these examinations 3,904 people were found infected. Of this number 3,840 received 9,859 treatments an average of nearly three treatments to each person.

Upon finishing the campaign in Ashe County, the last county to make provision for the work, the State furnished a record, and stands today as the only State in the Union to have a county appropriation and a county campaign in every one of its hundred counties, and while the infection was not so severe in this State as in many others, still the number of examinations and treatments exceed those of any other State, for the entire five years.

During the past two years many changes have taken place in the personnel of the workers. Dr. John A. Ferrell, the organizer and builder of the dispensary system in this State, putting it in advance of all others and keeping it there, was called to Washington July, 1913, to assume direction of the work in the entire South. He was succeeded at Raleigh by Dr. C. L. Pridgen and later by Dr. W. P. Jacocks, both former field directors in this State. The field force, recruited from time to time as occasion required, was composed at all times of excellent young men and the splendid record which they have made remains as a lasting evidence of their separate and individual efficiency. To four of these men have been given the responsibility which come with the duties of Whole Time County Health Officers.

## COMMUNITY HEALTH WORK.

During 1913 attention was called to Knott's Island in Currituck County. The people on this island employed a physician for his whole time paying him a stated yearly salary. At the invitation of this physician and of the people of the island a member of the field force was sent to begin a campaign of thorough eradication. While there, every person was examined for hookworm disease, those infected were treated, and there was installed at several public places and at some private homes seven fly proof privies. The possibilities which this work opened were seen to be great and in April, 1914, second dispensary campaigns were abandoned for this intensive and progressive method which will lead undoubtedly to entire eradication and to complete prevention.

Upon the urgent invitation of its citizens a Field Director and an assistant were sent to Salemburg, Sampson County, in April to do this intensive work. Dr. Collinson was told that his work would be completed when he made a sanitary inspection of every home; had examined every individual for hookworm disease; had treated those infected until cured, and had constructed at every home a sanitary privy. On October first the Director reported that 754 of the 875 people had been examined; that 251 were infected and treated; that 145 had been cured as evidenced by subsequent microscopic examination, and 149 of the 168 homes inspected had been provided with a fly-proof privy. On leaving, a committee appointed by representative citizens assumed the duties of seeing that the work accomplished was kept intact.

Similar work was established in five other communities in different counties in Eastern North Carolina. By December 31st the entire six communities were reported as having completed the assigned work. Of a total population of 5,566, 4,914 were examined for Hookworm disease. Of these 1,468 were found infected and 1,360 were given 2,381 treatments. Microscopic re-examinations showed that 264 of those treated were cured. It is undoubtedly true that a larger number of those treated were cured, also, but these failed to return specimens for re-examinations and their cures could not be verified, therefore, by the microscope. Most significant, however, is the fact that at the 1,074 homes inspected there were erected 1,014 fly-proof privies. In two communities, Philadelphus, Robeson County, and Ingold, Sampson County, a fly-proof privy was erected at every home, white and colored.

The end of the year 1914 finds a campaign conducted in every county in the State; second campaigns in seven counties; completed community work at Knott's Island and in six other communities; and the State leading all other states in every branch of this work. In order to obtain such a record too much credit cannot be given to the press of the State, to members of the profession, to the State Laboratory of Hygiene and to the State Board of Health for a generous supply of literature of all kinds.

Intensive community work is difficult work. It requires energy, perseverance, persistence, persuasive and organizing powers and unbounded tact. That the field men were able to accomplish so much of this pioneer work in such a short time speaks highly of their efforts and qualifications; and, on the other hand, indicates a definite willingness on the part of the people to respond to opportunities offered in such a manner.

Very truly yours,

W. P. JACOCKS, Director.

## Report of the Bureau of Engineering and Education

The major part of the work of this bureau is educational, that is, in getting before the public in a simple, practical, non-technical manner the elementary facts about public health, sanitation and hygiene which will directly or indirectly reduce the death rate and enable our people to live longer and better. This bureau is pursuing a number of means to this end. Chief among these means is the publication of a monthly health bulletin which now goes to every doctor, lawyer, preacher, school teacher, state, county and town official in the State so far as we are able to keep abreast with the ever-changing addresses. The mailing list for the bulletin now contains about 48,000 names, and is growing steadily.

Besides the monthly health bulletin, special bulletins and leaflets on typhoid, tuberculosis, babies, hookworms, flies, sanitary privies, malaria, whooping cough, measles, diphtheria, scarlet fever, and other public health subjects are published. Accurate records of the number of each of these bulletins and leaflets published and distributed have not been kept, but to give some idea of the extent of this work, it may be said that during the last two years the separate pieces of literature distributed on tuberculosis alone approximates a half million, while the literature on flies makes nearly another half million. Practically none of this literature is sent out except upon request.

The daily and weekly papers of the State also carry a large amount of public health matter sent out by this bureau. It might be noted in this connection that so far as can be learned, this Board was one of the first, if not the first, in the Union to undertake issuing regular popular health articles to the papers of the State. Now such educational methods are growing popular all over the country and it is interesting to note that during the last two or three years quite a number of other state boards of health have followed North Carolina's example. In fact, we are complimented to note that some of them occasionally use the material sent out by this office in their own state. It has been estimated that through the aid of the papers of the State, public health educational matter, put up in terse, popular style, reaches over a quarter of a million North Carolina homes. The newspapers are a mighty agency for public health work and for whatever is accomplished in the way of public health in this State the press must receive a great amount of the credit for placing the matter squarely before the people.

This bureau has found that another excellent means of teaching the principles of public health and sanitation is by means of exhibits. At the State Fair for the last two years this Board has given health exhibits. By means of actual working models, charts and pictures a great mass of people have been reached in this way, started to thinking and given some public health literature, who could scarcely have been reached in any other manner.

In connection with the health exhibit, this bureau endeavored to encourage babies' health conferences. Hundreds of babies from all over the State were entered, judged, and their physical defects, so far as possible, were pointed out to the mothers. The direct benefit to these few hundred babies is comparatively small compared with the tremendous amount of interest awakened

in child welfare throughout the State. An evidence of this interest was noted in the fact that the daily requests for literature on the subject of care and feeding of babies increased four or five hundred per cent for several months following these exhibits and conferences.

Recently the health exhibit was enlarged and revised and taken to Jacksonville, Florida, to participate in the Southern Health Exhibition held in that city in connection with a meeting of the American Public Health Association. This exhibit material is arranged in a conveniently portable manner and is now accessible to any person or organization in the State that desires to hold such an exhibit. The loan of this material is conditioned only upon the provision that those borrowing it will prepay transportation charges.

Nearly a year ago this bureau undertook a somewhat new line of work. Through the kindness of his Excellency, Governor Locke Craig, a personal letter from the Governor was sent to every mother in the State who had her baby's birth recorded. Along with this letter is sent a copy of the Board's special bulletin on care and feeding of babies. This work was continued for about three months and was suspended only because of the added expense which it was not thought our budget could bear for the remainder of the year. When it is considered that during the year by this means about 60,000 mothers would receive this literature within a few weeks after the birth of their babies, the value of such work can readily be appreciated. It might also be noted that so far as can be learned, only one other State sends every mother who has her baby's birth recorded a bulletin on care and feeding of babies, and while that state has had a registration law for several years, it has been only within the last year or two that they have undertaken such work.

Other educational means are being studied, tried out, and developed as opportunity presents. It is not thought necessary or advisable to report on any of these projects under consideration at this time.

Other activities of this bureau consist of writing about 3,000 personal letters a year, while by means of a multigraph equipment we were enabled to produce approximately 300,000 copies of multigraph letters, post cards and various forms for this and other bureaus at a saving of several hundred dollars over current commercial prices.

The engineering work of this bureau consists in passing on plans and specifications for installations of public water supplies, and sewage disposal plants throughout the State as required of this Board by law, and in keeping in touch so far as possible with conditions, on watersheds and elsewhere, which may effect the quality of the water of any public water supply. The value of such oversight may be better appreciated when it is recalled that during the past year in at least six instances proposed plans for public water supplies have been disapproved because in each case in one or more particulars they failed to adequately safeguard the purity of the supply. In five instances these plans have been revised and later received the approval of the Board, while the sixth case is pending and revised plans are being made. The bureau takes this occasion to thank Col. J. L. Ludlow, engineer member of the Board, for advice and suggestions in engineering questions of considerable moment.

The foregoing brief report will serve to show the present status and growth of the work of this bureau. The present growth has been almost entirely in response to the demands of the public. For example, no literature is

sent out except upon request of the person to whom it is sent or upon the request of some one else that such literature be sent. About three years ago the janitor usually filled all such requests for literature in a few minutes just before closing each day. Now it takes the greater part of one clerk's time to supply these requests. As soon as the public learns that a new bulletin or piece of literature is available the requests begin to pour in for it.

#### RECOMMENDATIONS.

As the public health interest of our people will doubtless increase in the future in substantially the same rate that it has in the past it would seem wise to provide for this growth. To this end it will be the policy of this bureau to increase, improve and perfect the various lines of endeavor that experience has indicated are the most profitable and yield the greatest returns for the money spent in the conserving of lives, health, happiness and efficiency of our people so far as the means at our disposal will permit. To this end this bureau hopes to rewrite and revise from time to time such of its special bulletins as may appear necessary and to prepare also bulletins, leaflets, placards, etc., on such special health subjects as might be of interest and value to the public at large.

It is to be hoped that among other things the present Legislature will make it possible to resume the issuing of letters and literature to mothers who have their baby's birth recorded. To issue nearly seventy thousand of these letters a year will cost approximately \$1,200.

It has been found that traveling sets of lantern slides with corresponding lectures already written, which will enable persons so desiring to give illustrated lectures by merely reading the written lecture to the audience while someone else runs the slides through a lantern, are proving popular and profitable. A number of these sets of slides and lectures should be added during the next two years.

Rural schools and churches that do not have access to stereopticon lanterns frequently desire the loan of lanterns as well as slides and lectures. For the benefit of such we feel that the Board should have a number of portable stereopticon lanterns which might be loaned and sent by parcels post to the remotest school, church or community in the State, together with slides, lectures and literature.

For use in the moving picture shows and elsewhere throughout the State, it is the opinion of this bureau that the Board should follow the example of other boards of health in the country and provide a number of traveling moving picture health films.

Our present traveling health exhibit should be improved and enlarged and loaned wherever desired. Indeed a much better arrangement would be to have a health train as is now employed by some other boards of health throughout the country. Effort has been made to secure the loan or rental of one of these outfits but for many reasons this has been found impracticable. One State equipped a single car for a net expense of material of about \$700, while the equipment of another is estimated to have cost about \$1,100 or \$1,200, exclusive of the cost of cars.

A goodly number of miniature traveling health exhibits on such subjects as tuberculosis, typhoid, flies and sanitation for use in the schools of the State should be employed. These would consist largely of small charts and pictures and be sent by parcels post, such exhibits to be loaned to schools

for not over a week at a time. In quantities of not less than thirty identical outfits on a particular subject, they should be furnished for from \$5 to \$6 apiece. The postage, repairs and replacements per year would probably amount to a similar amount. In from one to two years, the probable life of such an exhibit, practically all the schools that so desired would have had an opportunity to use the exhibit on any one subject.

At our present rate, another 10,000 people or more will ask to be placed on our mailing list during the next year. Plates for these names, put up in permanent form, will cost \$225. The postage item of this bureau is already large and growing. In all probability it will increase from \$300 to \$500 a year during the next two years.

With the increased work for which this bureau will doubtless be called upon additional help, mostly clerical and stenographic, will be needed. It will probably be necessary to add two clerks at \$50 per month during the coming year and still another next year.

In all, if this bureau keeps up with the demands made upon it, not less than \$4,000 additional will be needed in 1915 and \$6,000 in 1916.

Respectfully submitted,                   WARREN H. BOOKER,  
*Chief Bureau of Engineering and Education.*

## Report of the North Carolina Sanatorium

DR. W. S. RANKIN, *Secretary State Board of Health, Raleigh, N. C.*

MY DEAR DOCTOR:—I desire to submit to you and through you to the State Board of Health, the Governor and General Assembly, a report of the North Carolina Sanatorium for the treatment of tuberculosis for the year ending November 30, 1914. This is the proper period for a biennial report, but the Sanatorium having been closed during the fall of 1913 by the authorities then in charge, the Board of Directors, and their financial report having been passed on by the special session of the Legislature, and it being impossible to make a medical report for the previous year at this time, and the State Board of Health having had the Sanatorium turned over to them by the special session of the Legislature, 1913, and having assumed active control of the Sanatorium December 1, 1913, it was thought wise and proper for this report to cover the fiscal year December 1, 1913, to November 30, 1914.

The Bureau of Tuberculosis has wisely been placed under the same management as the Sanatorium, and the Superintendent of the Sanatorium is Director of the Bureau of Tuberculosis, and the Assistant Superintendent, Dr. P. P. McCain, is Assistant Director. This was thought wise, because those directing the Sanatorium would from that angle increase their efficiency for the fight against the disease throughout the State and gain valuable information and knowledge that cannot be gained outside a Sanatorium, and there would be no duplication of work.

The work of the Bureau has not been pushed with the vigor desired, on account of absence of funds, but it is hoped that these will be provided by the next General Assembly; and the first thing the Bureau will do will be to enforce the law requiring registration with the Bureau of all cases of tuberculosis in the State and furnishing free sputum cups and directions for the proper disposal of sputum. It is a sad commentary that sputum cups cannot be purchased in more than a dozen of the hundred counties in North Carolina.

*Our Postoffice.*—We have had established during the year a postoffice, officially known as "Sanatorium," which proves a great convenience to management and patients and relieves us of the expense of bringing the mail out from Aberdeen amounting to five dollars per month. It also greatly improves our mail facilities, as we now have a postal clerk on the A. & R. Railway and get mail from the South direct every morning.

*Our Dairy.*—While our dairy equipment is crude, and perhaps some of our cows are not giving sufficient milk to pay for their keep, yet we have produced 7,952 gallons of milk in the last six months and have had a total of 15,092 hospital days during the same period, making approximately half a gallon of whole sweet milk per day per patient and at a cost of about thirty cents per gallon or a little less. Figures for the first six months of the year are not available. Our cows have all been tuberculin tested and no tuberculosis was found.

*Our Farm.*—We have in cultivation about a hundred acres. Our present farming activities are directed along the line of feeding the dairy and producing vegetables for the table, neither of which are we doing to our satisfaction. We should have at least two hundred acres more in cultivation, a hundred of which should be planted to fruits. This section of the State is becoming famous for its fine peaches, pears, berries, melons, potatoes, etc., etc., and it is to be hoped that some demonstration farm work shall be done on the State's Sanatorium property which shall prove alike profitable to the Sanatorium and to the people of this section, if not the entire State.

*Our Buildings.*—In the main the buildings are admirably adapted for the treatment of "up patients," but not at all adapted for "bed patients." It is impossible to conduct a sanatorium for the treatment of tuberculosis without having "bed patients," and would not be desirable if it were possible. Our buildings are not so correlated as to be used to the greatest and best advantage. We have in one room 14x14 the following activities: Superintendent's private office, bookkeeper's office and filing cases, nurses' chart room and stenographer's desk (on landing of stairway), sterilizing room, head nurse's office, drug room, throat treatment room, etc., and this is a sample of the inadequacy of our facilities.

We need a new building which shall be for all time to come the main building and which shall comprise in one, business and medical offices, laboratory rooms, drug rooms, etc., receiving building and hospital which will care for the "bed patients." This will enable us to correlate and use to advantage all present buildings. It will also enable us to do our work in a satisfactory manner, which is impossible at this time.

*Light, Heat and Power.*—Light by kerosene, heat mostly by open fire, gasoline engines for power; this is at once, crude, inconvenient, expensive and dangerous. We should have a power plant, in which building would be located heating plant, lighting plant, cold storage plant, bottling plant, laundry, etc. The express on our laundry costs us more than the work ought to cost. Our ice costs us \$100 per month in the summer, and before we got our present refrigerator box the loss of meat, eggs and produce was even greater.

*Our Location.*—After considerable experience let it be said that we do not believe a better location could be found. The Sanatorium stands on a high elevation, giving a complete survey of the horizon from every direction. This is the only point we have ever seen where such an unobstructed view is had save on the ocean and the summit of Pike's Peak. This, then, gives us refreshing breezes night and day the summer through and makes the summer more like summer in the mountains of Western North Carolina than any place we have been, while the winter is equable enough for the moneyed Tufts to form a winter resort hard by, at the now famous Pinehurst.

*Our Per Capita Cost, \$1.71 Per Day.*—On account of our lack of storage facilities, limited appropriation and credit, we have found it necessary to buy in small quantities, making the prices and transportation higher, and we found in increasing the number of patients from thirty to ninety, averaging eighty-one for the last six months, it required much larger purchases of equipment than would obtain when we were serving about the same number all the time. In giving the patients a first-class diet, which is necessary in the treatment of tuberculosis, costing nearly \$1 per day for food alone, we

have found it necessary to practice economy in other places where it was at times very trying. No good sanitarium has ever been conducted on less than \$1.50 per day, ranging on up to \$2 per day; and the first part of the year necessarily having been very expensive on account of change of management, opening the institution, the small number of patients, the high price paid for nurses, etc., we really consider ourselves fortunate in being able to report an average per capita cost of \$1.71 per day per patient. With proper equipment it is my opinion that we can run the institution on \$1.50 per day. It is probable that a State purchasing agent would save the State more than enough money to run one of her smaller institutions.

*Religious and Social Life at the Sanatorium.* We have a prayer service during the week, usually conducted by some of the ministers of the neighboring towns of Aberdeen and Raeford, and a Sunday School service on Sunday afternoon. We have had two patients who were ministers; Rev. W. B. Waff and Rev. S. A. Edgerton; and their conduct of the services during their residence with us has been a great help to us and their ministry has been a great blessing to us.

An occasional entertainment in which the patients, nurses and staff participated has been very enjoyable, especially the Hallowe'en party with the fall decorations, including the proverbial pumpkin; the Christmas tree and the marshmallow roast during the Christmas holidays, etc. The religious and moral tone of the Sanatorium is very satisfactory.

*Bequests.* Through the will of the late Miss Angie Gilbert, of Saluda, N. C., we are to receive the residue of her estate, which, however, will not be paid over for eight or ten months. She died of tuberculosis and had this intelligent and well directed sympathy for her fellow sufferers. We have had about one hundred and fifty good books donated to our library, and the good people of Concord have kindly given us one hundred dollars with which to buy book cases.

The 1914 Red Cross Seal Campaign made available for the fight against tuberculosis in North Carolina about ten thousand dollars. (Exact amount not known at this writing.) This will be used in some places to employ visiting nurses, in others to send a patient to the Sanatorium; in others where smaller sales are had, to help worthy deserving patients to food, shelter and medicine; in others to conduct educational campaigns on tuberculosis, etc. We have reason to believe that other donations of much larger proportions will be forthcoming as soon as the state provides the much needed physical equipment at the Sanatorium.

*Our Capacity.* Our capacity at most is eighty, but we have been crowding our building almost beyond the limit of endurance and have been carrying ninety patients for the past three months and have rejected or postponed nearly two hundred applications in the last six months, notwithstanding the fact that all physicians in the State knew there was no room only as some patient left.

*Fire Protection and Water Supply.* We have absolutely no fire protection. We have not sufficient water storage facilities, only 12,000 gallons, and we use that much every day, to fight fire and no water mains to carry it; the largest main is two inches. We have no fire extinguishers and have not had the money since the present management assumed control with which to buy them.

*The Medical Side.* The medical work has been conducted in a satisfactory way taking into consideration the equipment and facilities. We make a detailed report to the physician sending the patient as soon as we have completed our first examination and other reports any time he may desire. Our laboratory is scant in equipment and scanner, if possible in housing, but notwithstanding these handicaps we have made five hundred laboratory examinations during the months of September, October and November, including sputum examinations, urine analyses, both chemical and microscopical, stomach analyses, blood cell counts and blood examinations for plasmodium.

*X-Ray.* The X-ray is at this time one of the important diagnostic methods in tuberculosis. Pneumothorax work cannot be done scientifically or satisfactorily without an X-ray outfit, and this is one of the most important of the latter day developments in the treatment of tuberculosis. We are urgently in need of an X-ray outfit.

Respectfully submitted,

L. B. McBRAYER,  
*Superintendent.*

#### MEDICAL REPORT.

#### DEFINITIONS OF TERMS EMPLOYED.

##### ON ADMISSION.

These definitions indicate the furthest extent of disease and the greatest severity of symptoms that a patient can present and still belong to the stage defined. All patients beyond the incipient stage fall under the moderately advanced stage unless the physical signs and symptoms exceed those of the moderately advanced stage, when they should be classified as far advanced.

##### *Incipient.*

Slight or no constitutional symptoms (including, particularly, gastric or intestinal disturbance or rapid loss of weight). Slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours.

Expectoration usually small in amount or absent. Tuberclue bacilli may be present or absent.

Slight infiltration limited to the apex of one or both lungs or a small part of one lobe.

No tuberculous complications.

##### *Moderately Advanced.*

No marked impairment of function, either local or constitutional.

Localized consolidation moderate in extent with little or no evidence of cavity formation; or infiltration more extensive than under incipient. No serious complications.

##### *Far Advanced.*

Marked impairment of function, local and constitutional.

Marked consolidation of an entire lobe.

Or disseminated areas of beginning cavity formation.

Or serious complications.

##### *Miliary Tuberculosis.*

***Arrested.*****ON DISCHARGE.**

All constitutional symptoms and expectoration with bacilli absent for a period of six months; the physical signs to be those of a healed lesion.

***Apparently Arrested.***

All constitutional symptoms and expectoration with bacilli absent for a period of three months, the physical signs to be those of a healed lesion.

***Quiescent.***

Absence of all constitutional symptoms, expectoration and bacilli may or may not be present; physical signs stationary or retrogressive, the foregoing conditions to have existed for at least two months.

***Improved.***

Constitutional symptoms lessened or entirely absent; physical signs improved or unchanged; cough and expectoration with bacilli usually present.

***Unimproved.***

All essential symptoms and signs unabated or increased.

**TERMS USED IN DEFINITION OF "INCIPIENT."****1. *Slight Constitutional Disturbance.***

Slight loss of appetite, of strength, of weight; lassitude; possibly slight acceleration of pulse or possibly slight elevation of temperature. The impairment of health may be so slight that the patient does not look or feel sick in the ordinary sense of the word.

**2. *Slight Elevation of Temperature.***

Maximum temperature after rest for one hour, never goes 99.5 to 100 degrees F. by mouth (or 100.5 per rectum).

**3. *Slight Acceleration of Pulse.***

Maximum pulse rate not over 90 after rest for one hour, sitting or lying, except when due to causes other than tuberculosis.

**4. *Absence of Tubercle Bacilli.***

Each monthly examination (if the sputum be negative), to consist of a careful microscopic examination, with a mechanical stage, of two smears, devoting at least three minutes to each smear, made from selected particles (at least six from different parts) of the sputum on each of three successive days. The morning sputum should always be obtained, or, better, the minute bits that some arrested patients raise at very infrequent intervals. It is not yet deemed wise to insist on digestion and centrifugalization, or on inoculation of guinea-pigs.

**5. Infiltration.**

Physical signs of slight prominence of the clavicle, lessened movement of chest, narrowing of apical resonance with lessened movement of base of lung, slight or no change in resonance, distant or loud and harsh breathing, with or without some change in the rhythm (i. e., prolonged expiration); vocal resonance possibly slightly increased; or fine or moderately coarse rales present or absent. If sputum contains tubercle bacilli, any one of these.

**6. Apex.**

That portion of the lung situated above the clavicle and the third vertebral spine.

**7. Small Part of One Lobe.**

An area of one or two intercostal spaces, or an area not exceeding 60 to 80 sq. cm. in extent, according to the size of the patient.

**TERMS USED IN DEFINITION OF "MODERATELY ADVANCED."****8. Marked Impairment of Function, Either Local or Constitutional.**

Local: Marked dyspnea on exertion, limiting seriously the patient's activity.

Constitutional: Marked weakness, anorexia, tachycardia.

**9. Moderate Extent of Localized Consolidation.**

An area of one-half lobe or less, but may involve both apices; marked dullness, bronchial or decidedly broncho-vesicular breathing; markedly increased vocal resonance; rales usually present. These signs are to be sharply limited as to area instead of gradually shading into normal physical signs.

**10. Evidences of Destruction of Tissue.**

Presence of tubercle bacilli or elastic fibers in the sputum or the presence of the physical signs of a cavity. There are no absolutely certain physical signs of cavity but a combination of any four of the following signs is to be taken as indicative of a cavity: (1) cracked-pot note; (2) amphoric breathing; (3) intense whispering pectoriloquy; (4) a veiled puff or post-tussive suction; (5) bubbling or resonant rales. "Physical signs of softening" do not admit of any definition apart from that of cavity formation, and the terms should not be used.

**11. Disseminated Fibroid Deposits.**

More or less localized areas of fibrous tissue, producing on physical examination, some change or dullness in the percussion note, more or less increase of vocal resonance, harsh, suppressed or broncho-vesicular breathing, rales sibilant or sonorous usually, but at times fine and moderately coarse.

12. *Serious Complications.*

These should be limited to tuberculous complications, such as meningitis, pharyngitis, laryngitis (except slight thickening in the posterior interarytenoid space, and superficial ulceration of a vocal cord), enteritis, peritonitis, nephritis, cystitis, orchitis, adenitis (unless very slight), etc.

## STATISTICAL.

Number of patients treated during year.....	248
Number of patients in Sanatorium December 1, 1914....	78
Not classified .....	6
Not tuberculous .....	2
Number of patients to be reported on .....	162

CLASS I. FIFTY-SIX PATIENTS WHO REMAINED LESS THAN THIRTY DAYS.

Condition on Admission	Arrested	Apparently Arrested	Quiescent	Improved	Unimproved	Died
Incipient.....	8			8		
Moderately advanced.	24			21	3	
Far advanced.....	23			9	14	
Acute tuberculosis....	1				1	
Total.....	56			38	18	

Average stay.....	18.25 days	Gained weight.....	27	Lost weight.....	3
Longest stay.....	29 days	Average gain.....	4.11 lbs.	Average loss.....	3.16 lbs.
Shortest stay.....	2 days	Largest gain.....	14 lbs.	Largest loss.....	4 lbs.
		Smallest gain.....	1.25 lbs.	Smallest loss.....	2. 5 lbs.
		Not weighed.....	24		

CLASS II. SIXTY-SEVEN PATIENTS WHO REMAINED FROM THIRTY TO EIGHTY-NINE DAYS.

Condition on Admission	Arrested	Apparently Arrested	Quiescent	Improved	Unimproved	Died
Incipient.....	7			5	2	
Moderately advanced.	30			6	24	
Far advanced.....	30				13	17
Acute tuberculosis.....						
Total.....	67			11	39	17

Average stay.....	52.07 days	Gained weight.....	45	Lost weight.....	14
Longest stay.....	89 days	Average gain.....	10.01 lbs.	Average loss.....	3.07 lbs.
Shortest stay.....	30 days	Largest gain.....	42.5 lbs.	Largest loss.....	5. lbs.
		Smallest gain.....	1.5 lbs.	Smallest loss.....	1 lbs.
		Not weighed.....	8		

## CLASS III. THIRTY-NINE PATIENTS WHO REMAINED NINETY DAYS OR MORE.

Condition on Admission	Arrested	Apparently Arrested	Quiescent	Improved	Unimproved	Died
Incipient..... 3		2	1			
Moderately advanced. 24	2	4	15	2	1	
Far advanced..... 12	2	-----	1	6	2	1
Acute tuberculosis .....						
Total..... 39	4	6	17	8	3	1
Average stay..... 153.2 days	Gained weight..... 30		Lost weight..... 8			
Longest stay..... 335 days	Average gain..... 15.28 lbs.		Average loss..... 8. 9 lbs.			
Shortest stay..... 91 days	Largest gain..... 34 lbs.		Largest loss..... 24 lbs.			
	Smallest gain..... 1 lbs.		Smallest loss..... 1¼ lbs.			
	Not weighed..... 1					

## HISTORY OF HEMORRHAGE IN THE 162 PATIENTS.

	Positive..... 52	Previous..... 44	
	Negative..... 110	During residence..... 5	
	Total..... 162	Previous and during residence 3	

## COMPLICATIONS.

Anal Fistula .....	5
Asthma .....	2
Bronchitis .....	6
Broncho-pneumonia .....	2
Cystitis .....	1
Diabetes .....	1
Hemorrhoids .....	1
Herpes Zoster .....	1
Hydro-pneumothorax (spontaneous) .....	1
Ischio-rectal Abscess .....	1
Malaria, Tertian .....	1
*Mumps .....	1
Mitral Regurgitation .....	1
Nephritis .....	2
Neurasthenia .....	4
Pleurisy with Effusion .....	5
Pregnancy .....	1
Tubercular Enteritis .....	5
Tubercular Laryngitis .....	21
Tubercular Otitis Media .....	2
†Tubercular Peritonitis .....	1
Tubercular Pharyngitis .....	2

\*No other cases developed.

†Patient had fistula following appendectomy; peritonitis developed causing intestinal obstruction and necessitated operation.

## PATIENTS GIVEN THE TUBERCULIN TEST.

Positive .....	9
Negative .....	2
Total .....	11

## CIVIL CONDITION.

Married .....	82
Single .....	69
Widowed .....	11
Total .....	162

## AGE AND SEX.

	10-15	15-20	20-30	30-40	40-50	50-60	60-70	70-80
Male.....105	1	5	46	29	14	7	3	-----
Female.....57	3	5	25	16	4	3	-----	1
Total.....162	4	10	71	45	18	10	3	1

## OCCUPATIONS OF THE 162 PATIENTS.

Bookkeeper .....	2	Painter .....	1
Brickmason .....	1	Pupil Nurse .....	1
Butcher .....	1	Physician .....	2
Carpenter .....	5	Pharmacist .....	2
Clerk in Bakery .....	1	Register of Deeds .....	1
Clerk in Store .....	7	Road Commissioner .....	1
Cotton Mill Operator .....	10	Rural Mail Carrier .....	2
Fireman (Stationary Engine) ..	1	Social Service Worker .....	1
Farmer .....	23	Supt. of Cotton Oil Mill .....	1
Foreman of Cotton Mill .....	1	Student .....	14
Freight Conductor .....	2	Shipping Clerk .....	2
Horse Trader .....	1	Seamstress .....	1
House work at Home .....	8	Stenographer .....	4
House wife .....	31	Street Car Conductor .....	1
Iron Moulder .....	2	Stock Clerk in Machine Shop...	1
Jeweler .....	1	Telegraph Operator .....	4
Liveryman .....	1	Teacher .....	2
Lumber Mill Operator and Own- er .....	1	Tobacco Buyer .....	1
Machinist .....	5	Treasurer Cotton Mill.....	1
Merchant .....	8	Traveling Salesman .....	2
Milliner .....	1	Varnisher in Furniture Factory..	1
Minister .....	3	Total .....	162

## TOWNS FROM WHICH THE PATIENTS CAME.

Altamahaw .....	1	Lillington .....	3
Apex .....	1	Lucama .....	1
Aulander .....	1	Macclesfield .....	1
Bailey .....	1	Manteo .....	1
Burgaw .....	1	Marler .....	1
Balsam .....	1	Mars Hill.....	1
Burlington .....	4	Macon .....	1
Carthage .....	1	McFarland .....	1
Charlotte .....	7	McLeansville .....	1
Creedmoor .....	1	Micro .....	1
Cherryville .....	1	Maxton .....	2
Calypso .....	1	Mocksville .....	1
Conway .....	1	Mooresboro .....	1
Chinquapin .....	1	Morganton .....	1
Columbia .....	1	Mt. Airy.....	1
Conover .....	1	Mt. Gilead .....	1
Duke .....	1	Monroe .....	2
Dunn .....	1	Mt. Olive.....	2
Durham .....	3	New Hill .....	3
Elizabethtown .....	1	Norwood .....	1
Everetts .....	1	Oxford .....	2
Elizabeth City .....	3	Old Trap.....	1
Enfield .....	1	Pembroke .....	1
Fuquay Springs.....	1	Pineville .....	2
Fayetteville .....	3	Prinson .....	1
Fallston .....	1	Plymouth.....	1
Fair Bluff.....	1	Ramseur .....	1
Gastonia .....	1	Raleigh .....	3
Goldsboro .....	1	Randleman .....	5
Granite Falls.....	1	Raeford .....	2
Greenville .....	1	Roxobel .....	1
Guilford College.....	1	Rocky Mount.....	6
Grimesland .....	1	Reidsville .....	1
Greensboro .....	13	Rougemont .....	1
Hertford .....	1	Salemburg .....	1
Hatteras .....	1	Salisbury .....	1
Harrisburg .....	1	Smithfield .....	2
Hillsboro .....	1	Shannon .....	1
Hickory .....	4	Southern Pines .....	1
King .....	1	Statesville .....	1
Kinston .....	1	Shelby .....	2
La Grange .....	1	St. Paul.....	1
Leasburg .....	1	Trinity .....	1
Lincolnton .....	2	Tobaccoville .....	1
Lenoir .....	1	University .....	1
Lexington .....	1	Union Ridge.....	1
Laurinburg .....	1	Vaughn .....	1
Liberty .....	1	Vineland .....	3
Lumber Bridge.....	1	Verona .....	1

Wade .....	1	White Oak.....	1
Weldon .....	1	Williamston .....	1
Whitaker .....	1	Youngsville .....	1
Weeksville .....	1	Yadkinville .....	1
Winston Salem.....	1		
		Yadkinville .....	1

## COUNTIES FROM WHICH THE PATIENTS CAME.

Alamance .....	5	Lincoln .....	2
Anson .....	1	Martin .....	2
Bertie .....	2	Madison .....	1
Bladen .....	2	Mecklenburg .....	9
Burke .....	1	Montgomery .....	2
Caldwell .....	2	Moore .....	2
Catawba .....	5	Nash .....	7
Cleveland .....	4	Northampton .....	1
Camden .....	1	Orange .....	2
Cumberland .....	4	Onslow .....	1
Columbus .....	4	Pitt .....	2
Chatham .....	1	Pender .....	1
Caswell .....	1	Pasquotank .....	4
Cabarrus .....	1	Perquimans .....	1
Davidson .....	1	Randolph .....	8
Dare .....	2	Robeson .....	6
Davie .....	1	Rowan .....	1
Duplin .....	2	Rockingham .....	1
Durham .....	5	Scotland .....	1
Edgemont .....	1	Sampson .....	1
Forsyth .....	2	Stokes .....	1
Franklin .....	1	Surry .....	1
Granville .....	3	Stanly .....	1
Guilford .....	15	Tyrrell .....	1
Gaston .....	2	Union .....	2
Harnett .....	6	Wake .....	8
Halifax .....	2	Warren .....	2
Hoke .....	2	Wayne .....	3
Iredell .....	1	Washington .....	1
Jackson .....	1	Wilson .....	1
Johnston .....	3	Yadkin .....	2
Lenoir .....	1		
		Total .....	162

## NATIONALITY OF THE 162 PATIENTS.

American .....	161
Syrian .....	1
Total .....	162

In addition to the regular sanatorium work we have been examining free of charge anyone who wished to come for diagnosis and consultation. Sixty-five such examinations have been made in the past nine months.

PHYSICIANS WHO HAVE MADE APPLICATION FOR ADMISSION OF  
PATIENTS.

Averitt, Dr. K. G.....	1	Caddell, Dr. S. W.....	2
Austin, Dr. F. D.....	1	Cloninger, Dr. L. V.....	1
Anderson, Dr. C. A.....	1	Chapin, Dr. W. B.....	1
Alston, Dr. Willis.....	1	Cooper, Dr. G. M.....	1
Adams, Dr. N. B.....	1	Carroll, Dr. J. W.....	1
Ayers, Dr. Thos. B.....	1	Carter, Dr. S. H.....	1
Alford, Dr. A. E. B.....	1	Caldwell, Dr. D.....	1
Abernathy, Dr. H. N.....	1	Cox, Dr. G. S.....	1
Armstrong, Dr. C. E.....	1	Dixon, Dr. Delia.....	1
Anderson, Dr. Jos. A.....	1	Dixon, Dr. W. H.....	1
Ashcraft, Dr. J. E. ....	1	Dowell, Dr. J.....	2
Black, Dr J. C.....	1	Dees, Dr. R. O.....	1
Bass, Dr. S. P.....	1	Dick, Dr. R. V.....	2
Burke, Dr. B. W.....	2	Doyle, Dr. W. P.....	1
Buchanan, Dr. E. J.....	1	Deligny, Dr. C.....	1
Boyles, Dr. J. H.....	2	Duncan, Dr. Guy F.....	1
Brittle, Dr. P. C.....	1	Duffy, Dr. Richard .....	1
Beall, Dr. W. P.....	3	Eagles, Dr. C. S.....	2
Braswell, Dr. J. C.....	1	Evans, Dr. T.....	2
Brown, Dr. G. W.....	2	Faucette, Dr. T. S.....	4
Brantley, Dr. H.....	2	Fearing, Dr. I.....	2
Bonner, Dr. K. P. B.....	1	Freeman, Dr. R. H.....	2
Bostic, Dr W. C.....	1	Falls, Dr. N. F.....	1
Barefoot, Dr. J. J.....	1	Floyd, Dr. A. S.....	1
Blair, Dr. M. P.....	2	Fox, Dr. D. L.....	1
Bonney, Dr. S. G. ....	1	Ferebee, Dr. C. G.....	1
Baird, Dr. John H.....	1	Fearing, Dr. Zenos.....	1
Browning, Dr. B. R.....	1	Felts, Dr. R. L.....	1
Battle, Dr. S. W.....	1	Fleming, Dr. W. L.....	1
Barr, Dr. T. E.....	1	Flippen, Dr. R. D.....	1
Buchanan, Dr. C. L.....	1	Foster, Dr. G. A.....	1
Buxton, Dr. J. T.....	1	Foscue, Dr. J. E.....	1
Bailey, Dr. M.....	1	Falls, Dr. B. F.....	1
Best, Dr. Henry B.....	1	Gibbs, Dr. J. B.....	1
Bahnson, Dr. H. T.....	1	Gamble, Dr. J. C.....	1
Boddie, Dr. W. P.....	1	Glenn, Dr. J. F.....	1
Balsley, Dr. T. E.....	2	Gilreath, Dr. F. H.....	1
Cheek, Dr. C. E.....	1	Gibbs, Dr. E. W.....	2
Campbell, Dr. J. R.....	1	Gates, Dr. F. P.....	2
Coleman, Dr. J. C.....	1	Glenn, Dr. H. F.....	1
Campbell, Dr. Reuben.....	1	Glasscock, Dr. Harold.....	1
Capp, Dr. C. L.....	1	Grady, Dr. J. C.....	1
Chaney, Dr. T. M.....	1	Graham, Dr. B. R.....	1
Cole, Dr. W. F.....	1	Gladmon, Dr. Edwin .....	1
Crowell, Dr. W. H.....	1	Greene, Dr. A. W.....	1
Campbell, Dr. J. I.....	3	Griffin, Dr. W. R.....	1
Crowell, Dr. L. A.....	2	Griffith, Dr. C. F.....	1
Cochran, Dr. J. T.....	1	Hinnant, Dr. M.....	1

Hunter, Dr. W. M.	1	McAdams, Dr. C. R.	1
Hunsucker, Dr. Charles	1	McGehee, Dr. J. W.	3
Holt, Dr. W. T.	1	McMillan, Dr. R. D.	1
Hyatt, Dr. F. C.	1	McDonald, Dr. A. A.	1
Horton, Dr. E. N.	1	McAnally, Dr. W. J.	1
Hicks, Dr. C. S.	1	McGoogan, Dr. V.	2
Hays, Dr. Ben K.	2	McIver, Dr. Lyman	1
Halford, Dr. J. W.	1	McFadden, Dr. R. H.	1
Harding, Dr. Tom	2	McManus, Dr. W. L.	1
Harrison, Dr. Edwin	1	McMillan, Dr. Jno. M.	1
Holt, Dr. W. P.	1	McCoy, Dr. T. M.	1
Hauser, Dr. E. A.	1	McElwee, Dr. R. S.	1
Hughes, Dr. C. M.	1	McMullan, Dr. O.	1
Hodgin, Dr. H. H.	2	McIver, Dr. E. M.	1
Hayes, Dr. R. B.	2	McCanless, Dr. W. V.	1
Hocutt, Dr. B. S.	1	McMullen, Dr. J. H.	1
Harrison, Dr. J. S.	1	Maxwell, Dr. H. B.	1
Hayworth, Dr. C. A.	1	Morehead, Dr. W. P.	1
Harper, Dr. J. H.	1	Mudgett, Dr. W. C.	1
Hill, Dr. D. J.	2	Menzies, Dr. H. C.	2
Highsmith, Dr. Chas.	1	Morse, Dr. John	1
Hyatt, Dr. H. B.	2	Meadows, Dr. W. J.	4
Ingram, Dr. C. B.	1	Michaux, Dr. E. R.	2
Johnson, Dr. R. W.	2	Moore, Dr. F. T.	1
Jenkins, Dr. P. C.	1	Monroe, Dr. J. P.	1
Johnson, Dr. B. C.	1	Maxwell, Dr. J. F.	2
Jurney, Dr. P. C.	1	Misenheimer, Dr. T. F.	1
Jones, Dr. C. D.	3	Myers, Dr. Jas. A.	2
Judd, Dr. E. C.	1	Mann, Dr. Jas. A.	2
Justice, Dr. J. T.	1	Myers, Dr. J. A.	1
Jenkins, Dr. J. H.	1	Mebane, Dr. W. N.	1
Jones, Dr. R. D.	1	Murphy, Dr. W. E.	1
Jennings, Dr. W. E.	1	Morehead, Dr. R. P.	1
Kirkpatrick, Dr. L. R.	2	Malone, Dr. J. E.	1
Kent, Dr. A. A.	1	Mayerberg, Dr. J. W.	1
Kirk, Dr. W. R.	1	Moore, Dr. Oren	1
Knox, Dr. John	1	Monk, Dr. H. G.	1
Kinsman, Dr. H. F.	1	Minor, Dr. C. L.	1
Kerns, Dr. T. C.	1	Mitchell, Dr. W.	1
Laughinghouse, Dr. C. O'H.	1	Mosely, Dr. H. P.	1
Long, Dr. E. F.	1	Monroe, Dr. Will	1
Lister, Dr. E. W.	1	Moore, Dr. W. J.	1
Liles, Dr. N. P.	1	Mann, Dr. E. D.	1
Lovett, Dr. W. D.	1	Newell, Dr. L. B.	2
Lovelace, Dr. T. B.	1	Neal, Dr. J. W.	1
Long, Dr. T. Y.	1	Newell, Dr. L. A.	1
Long, Dr. H. F.	2	Nelson, Dr. O. M.	1
Lyday, Dr. W. M.	1	Newell, Dr. J. C.	1
McNeill, Dr. J. W.	2	Newland, Dr. Mary	1
McLeod, Dr. Gilbert	1	Olive, Dr. W. W.	4
McPherson, Dr. John	1	Olive, Dr. P. W.	1

Phillips, Dr. M. D.....	1	Smithwick, Dr. J. E.....	1
Pitts, Dr. Walter Ingold.....	1	Spencer, Dr. T. B.....	1
Phillips, Dr. C. H. ....	1	Stanley, Dr. J. H.....	2
Powers, Dr. John B.....	1	Stevens, Dr. Martin L.....	2
Pinnix, Dr. J. A.....	1	Swindell, Dr. F. O.....	1
Patrick, Dr. J. E.....	1	Sadler, Dr. R. C.....	1
Pfohl, Dr. S. F.....	1	Strull, Dr. J. R.....	2
Patten, Dr. W. T.....	2	Sweeney, Dr. John.....	1
Powell, Dr. H. H.....	1	Slate, Dr. J. S.....	1
Pressly, Dr. Geo. W.....	1	Stuart, Dr. J. J.....	1
Pate, Dr. Geo. M.....	1	Shuford, Dr. J. H.....	1
Parker, Dr. J. R.....	1	Spencer, Dr. W. O.....	1
Pritchard, Dr. J. L.....	1	Tate, Dr. C. S.....	2
Parker, Dr. C. G.....	1	Tucker, Dr. H. M.....	2
Powell, Dr. W. E.....	1	Taylor, Dr. W. I.....	1
Quillen, Dr. E. B.....	3	Thompson, Dr. Joseph.....	1
Russell, Dr. C. R.....	2	Tillotson, Dr. S. F.....	1
Rosser, Dr. R. G.....	2	Tatum, Dr. M. M.....	1
Roberson, Dr. C. R.....	3	Tayloe, Dr. D. T.....	4
Rosier, Dr. R. G.....	1	Thompson, Dr. Cyrus .....	1
Rogers, Dr. J. R.....	3	Taylor, Dr. J. T.....	1
Rodwell, Dr. J. W.....	1	Terry, Dr. J. R.....	1
Reed, Dr. J. W.....	1	Twitty, Dr. J. C.....	1
Rowe, Dr. R. H.....	1	Trippe, Dr. C. M.....	1
Reeves, Dr. B. E.....	2	Underwood, Dr. O. E.....	1
Ross, Dr. C. E.....	1	Vernon, Dr. J. W.....	1
Royster, Dr. S. S.....	1	Von Ruck, Dr. Karl.....	1
Roberts, Dr. H. O.....	1	Wilkerson, Dr. C. B.....	1
Rankin, Dr. R. R.....	1	Walker, Dr. W. E.....	3
Rogers, Dr. W. A.....	1	Williams, Dr. C. B.....	2
Reed, Dr. R. M.....	1	Wilkerson, Dr. C. E.....	5
Ricks, Dr. L. E.....	1	Whitaker, Dr. F. A.....	1
Ross, Dr. Otho B.....	1	Witherspoon, Dr. J. J.....	1
Ross, Dr. R. D.....	1	Willams, Dr. J. A.....	1
Ramsour, Dr. G. A.....	1	Williams, Dr. J. W.....	1
Strosnider, Dr. C. F.....	2	Woodard, Dr. A. G.....	2
Sutton, Dr. O. U.....	1	Ward, Dr. I. A.....	1
Speight, Dr. Joseph.....	3	Whitaker, Dr. R. B.....	1
Sikes, Dr. G. L.....	1	Ward, Dr. W. H.....	2
Speight, Dr. R. H.....	1	Wellborn, Dr. Wm. R.....	1
Sanford, Dr. J. F.....	2	White, Dr. W. S.....	1
Shuford, Dr. Jacob.....	1	Wood, Dr. J. W.....	1
Seif, Dr. L. L.....	1	Wooten, Dr. A. M.....	1
Stanton, Dr. D. A.....	3	Wood, Dr. E. J.....	2
Stuart, Dr. H. D.....	1	Wrenn, Dr. Frank.....	1
Smithwick, Dr. W. P.....	1	Warren, Dr. R. F.....	1
Saunders, Dr. J. H.....	1	White, Dr. J. W.....	1
Steele, Dr. W. C.....	1	Williams, Dr. J. M.....	1
Somers, Dr. L. P.....	1	Wiggins, Dr. Carroll.....	1
Spruill, Dr. J. L.....	1	York, Dr. Nelson D.....	1
Smith, Dr. A. J.....	2	Yow, Dr. Ira A.....	2
		Zimmerman, Dr. C. St. V.....	1

**Financial Statement North Carolina Sanatorium**

NOVEMBER 30, 1914.

**CAPITAL ASSETS.**

Real Estate—Farm, .....	\$11,048.71
Real Estate—Hospital and Buildings,.....	63,506.97
Pump Station, .....	688.00
Dairy Fixtures, .....	206.73
Barns and Silos, .....	2,232.71
Club House Furniture and Fixtures, .....	20.00
Dining Hall and Kitchen Furniture and Fixtures.....	1,275.47
Hospital Furniture and Fixtures, .....	4,330.29
Nurses Home Furniture and Fixtures, .....	416.90
Automobile, .....	597.00
	<b>\$84,322.78</b>

**CURRENT ASSETS.**

Cash on hand, .....	\$ 443.06
Cash in bank, .....	241.12

**Inventory:**

Coal, ...	\$ 196.00
Crockery, .....	400.91
Drugs—Medicines, .....	100.00
Hospital Supplies, .....	200.00
Dairy Expense, (Feed),.....	1,041.00
Dairy Live Stock, .....	1,875.00
Farm Expense, (Feed),.....	120.00
Farm Machinery and Tools, .....	495.06
Farm Live Stock, .....	720.00
Linen and Bedding, .....	1,738.77
Provisions, .....	227.79
	<b>7,114.53</b>
	<b>7,798.71</b>

Total Assets ....., ..... **\$92,121.49***644.18**8143731***LIABILITIES.**

Bills Payable .....	\$3,074.48
Accounts Payable, .....	16,427.74
Unexpended fund for Library, .....	100.00
	<b>\$19,602.22</b>
Net Worth, .....	<b>72,519.27</b>
Total Liabilities, .....	<b>\$92,121.49</b>

## RECEIPTS.

Cash on hand December 1, 1913,.....	\$ 39.86
Cash in bank December 1, 1913,.....	34.53
State Appropriation—Maintenance, .....	20,000.00
State Appropriation—Construction and Equipment, .....	12,738.76
From Patients, .....	19,640.71

*Sundry Receipts:*

Automobile, .....	\$ 134.75
Donations to Orphan Children, .....	35.00
Donations to Library, .....	100.00
Dairy Live Stock, .....	52.00
Dining Hall and Kitchen Equipment, .....	.50
Fuel, Light and Water, .....	27.73
Hospital Supplies, .....	110.77
Ice, .....	.50
Laundry, .....	72.64
Provisions, .....	64.61
Service, Cooks, Etc., .....	5.91
Telephone and Telegraph, .....	2.70
	607.11
	\$53,060.97

## DISBURSEMENTS.

Automobile Expense, .....	\$ 151.20
Automobile, .....	206.00
Building and Improvements, .....	1,190.99
Bills Payable, .....	500.00
Crockery, .....	337.22
Drugs and Medicine, .....	515.54
Dairy Expense, .....	2,905.05
Dairy Live Stock, .....	200.00
Dining Hall and Kitchen Equipment, .....	835.64
Donations to Orphan Children, .....	35.00
Fuel, Light, and Water, .....	1,187.42
Freight, Express and Drayage, .....	1,181.26
Farm Expense .....	2,308.79
Hospital Supplies, .....	471.60
Hospital Furniture and Fixtures, .....	1,178.91
Ice and Coal, .....	920.66
Improvements Hospital, .....	5,703.37
Insurance, .....	5.00
Interest, .....	80.93
Laundry, .....	1,403.69
Linen and Bedding, .....	971.76
Nurses and Attendants, .....	2,555.67
Office Supplies, .....	43.09
Provisions, .....	13,964.73
Patients,—Refunds, .....	417.15
Pump Station, .....	20.00

Plumbing Repairs, .....	\$44.28
Real Estate—Hospital Building, .....	2,473.39
Salaries, .....	5,477.41
Service, Cooks, and Etc., .....	4,499.05
Silo, .....	188.00
Stamps and Stationery, .....	128.80
Pump Repairs, .....	12.48
Traveling Expense, .....	209.73
Telephone and Telegraph, .....	52.98
Unexpended Fund for Library, .....	100.00
Cash on hand November 30, 1914,.....	343.06
Cash in bank November 30, 1914, .....	241.12
	<hr/>
	\$ 53,060.97

## DEBIT.

Page Trust Co., .....	\$ 241.12
Real Estate Farm, .....	11,048.71
Real Estate Hospital and Buildings, Dec. 1, 1913....	\$51,576.86
Improvements .....	11,930.11
	<hr/>
Pump Station, December 1, 1913, .....	668.00
Improvements .....	20.00
	<hr/>
688.00	
Dairy Fixtures, December 1, 1913, .....	65.00
Improvements .....	41.73
Transferred from Farm Machinery and Tools. ....	100.00
	<hr/>
206.73	
Barns and Silos, December 1, 1913, .....	2,044.71
Improvements .....	188.00
	<hr/>
2,232.71	
Club House Furniture and Fixtures, Dec. 1, 1913....	320.00
Transferred to Hospital Furn. and Fix.....	300.00
	<hr/>
620.00	
Dining Hall and Kitchen Furn. and Fix. Dec. 1, 1913	295.00
Improvements .....	980.47
	<hr/>
1,275.47	
Hospital Furniture and Fixtures, Dec. 1, 1913,....	1,187.00
Improvements .....	2,634.76
Transferred from Club House Furn. and Fix..	300.00
Transferred from Furn. and Crock. acct.....	208.53
	<hr/>
4,330.29	
Nurses' Home .....	416.90
Automobile, .....	597.00
Cash on hand November 30, 1914, .....	443.06
Inventory November 30, 1914, .....	7,114.53
Old Accounts 1912-1913, .....	4,782.41

*Sundry Expense Accounts:*

Automobile Expense, .....	\$ 276.59
Drugs and Medicine, .....	655.43
Fuel, Light and Water, .....	1,291.04

Freight, Express and Drayage, .....	\$1,159.68
Farm Expense, .....	2,619.04
Hospital Supplies, .....	1,129.40
Dairy Expense, .....	2,517.16
Ice and Coal, .....	587.83
Interest, .....	792.28
Laundry, .....	1,369.41
Nurses and Attendants, .....	2,555.67
Office Supplies, .....	112.98
Provisions, .....	14,596.67
Plumbing Repairs, .....	216.25
Repairs to Farm Machinery and Tools, .....	76.15
Repairs to Pump Station, .....	189.32
Salaries, .....	5,788.17
Service, Cooks and Etc., .....	4,366.98
Stamps and Stationery, .....	380.99
Surveying and Mapping, .....	120.73
Telephone and Telegraph, .....	48.68
Traveling Expense, .....	324.69
Incidental Repairs and Directors Expenses,.....	299.80
 Insurance, .....	 356.45
	<hr/>
	<b>\$ 41,831.39</b>
	<hr/>
	<b>\$ 138,735.29</b>

**CREDIT.**

Surplus—includes State Appropriations, .....	\$ 99,909.51
Accounts Payable prior to Dec. 1, 1913, .....	\$ 6,184.89
Account Payable since Dec. 1, 1913, .....	10,242.85
	<hr/>
Patients, .....	19,223.56
Bills Payable, .....	3,074.48
	<hr/>
	<b>\$ 138,735.29</b>

**BILLS PAYABLE.**

Page & Johnson, .....	\$ 246.45
Aberdeen Store Company, .....	1,525.08
Aberdeen Store Company, .....	874.66
Aberdeen Hardware Company, .....	173.29
Fayetteville Steam Laundry Company, .....	200.00
Johnston Harvester Company, .....	55.00
	<hr/>
	<b>\$ 3,074.48</b>

## ACCOUNTS PAYABLE.

Aberdeen Store Co.....	\$ 501.10
Carter's Pharmacy, .....	1,424.14
Catawba Creamery .....	175.20
Fayetteville Steam Laundry.....	24.08
Howard .....	121.90
Hart-Ward Hardware Co.....	37.82
Imperial Fertilizer Co.....	609.00
International Harvester Co.....	178.05
David Knight.....	28.25
Odell Hardware Co.....	120.45
A. E. Rankin.....	1.20
J. W. Scott & Son.....	15.35
J. T. Turner.....	78.48
Fayetteville Ice & Manufacturing Co.....	256.59
Armour & Co.....	398.94
American Heating Co.....	165.26
J. S. Maultsby.....	424.95
Frank S. Betz Co.....	201.27
H. W. Baker Linen Co.....	125.96
Bureau of Engineering and Education.....	11.10
Brown Book Co.....	168.85
P. Blackson's Co.....	10.37
J. H. Culbreath & Co.....	218.98
Hotel Equipment Co.....	90.00
The National Drug Co.....	96.45
Owens & Minor Drug Co.....	31.62
Peoples House Furnishing Co.....	291.54
The Peabody Drug Co.....	166.81
Stone & Forsyth.....	90.58
Alfred Williams & Co.....	6.59
William M. Wilson's Sons.....	51.20
R. C. Williams & Co.....	217.28
North Carolina Board of Health.....	216.00
Alderman's Wholesale Confectioners.....	8.05
M. C. Brady.....	67.49
W. L. Brogden Co. ....	53.16
Hugh A. Keith, .....	2.63
The McNeill Bakery Co.....	106.08
Private Estate Coffee Co.....	24.50
Swift & Co.....	19.28
Johnson Garage & Machine Co.....	46.50
W. R. Koontz.....	102.90
Peoples Laundry, Inc.....	63.92
Columbia Laundry Co.....	152.24
Aberdeen Hardware Co.....	104.80
Southern Express Co.....	52.03
C. W. Antrim & Sons.....	28.29
Gulf Refining Co.....	84.44
J. T. White & Co.....	10.00

Freedman Manufacturing Co.....	\$66.60
Lonnie Reeves .....	25.00
John Graham .....	20.00
G. W. Ward.....	23.00
Bynum Taylor .....	150.00
McLean Grocery Co.....	13.70
Aberdeen Wholesale Grocery Co.....	6.00
D. Appleton & Co.....	20.00
Burley & Co.....	7.35
Cole Printing Co.....	85.81
Dobbin-Ferrall Co.....	41.63
H. D. Dougherty & Co.....	608.15
Eagle Hardware Co.....	5.00
Hoke Oil & Fertilizer Co.....	587.73
Horlick's Malted Milk Co. ....	4.00
Paul E. Hoeber.....	11.00
Hospital Supply & Drug Co.....	11.50
Journal of the Outdoor Life.....	3.60
Lenz & Lossau.....	42.25
H. K. Mulford Co.....	7.50
Pacific Flush Tank Co.....	23.10
Pack Square Book Co.....	143.00
The Patterson Co.....	62.77
Pine Crest Farm.....	15.00
Albert Pick & Co.....	104.60
The Randall Faichney Co.....	9.25
Rock Hill Buggy Co.....	14.06
The Southern Cotton Oil Co.....	45.14
The Scarborough Co.....	2.50
Joseph J. Stone & Co.....	15.09
Wills Book & Stationery Co.....	32.89
The Worrill Manufacturing Co.....	16.50
Thomas Y. Crowell Co.....	1.36
Carroll Adv. & Letterwriting Co.....	13.75
Prof. R. I. Poole.....	120.73
M. N. Suggs.....	38.00
McKee Surgical Instrument Co.....	1.33
Oxford Printing Co.....	6.50
Sydnor Pump & Well Co.....	46.12
American Medical Association.....	7.00
Bloom & Gadley Co.....	113.06
The Ekenburg Co.....	12.00
C. V. Mosby Medical Book Publishing Co.....	6.50
American Bottle Cap Co.....	51.60
Bramhall Deane & Co.....	2.63
The Gregg Co.....	5.75
The Lakeside Publishing Co.....	2.00
The Roessler & Hasslacher Ch. Co.....	110.44
T. W. Wood & Sons.....	166.26
J. G. Ball & Co.....	2.77
Darnell & Thomas .....	1.50

Dublin & Martin Co.	\$35.40
F. N. Taylor	13.05
William Wood & Co.	17.00
Eimer & Amend	4.60
General Fire Extinguisher Co.	1.00
Interstate Medical Journal Co.	2.00
Lea & Febiger	5.00
Remington Typewriter Co.	16.50
Surgical Selling Co.	8.81
The L. L. White Dental Manufacturing Co.	.97
Observer Co.	3.10
Dr. H. M. Alexander & Co.	6.00
F. A. Davis Co.	2.50
The Moffitt Iron Works Co.	173.83
News & Observer Co.	8.00
C. D. Gregg Tea & Coffee Co.	1.42
Marlow Bros.	26.25
Rex Blanket Co.	318.75
Musselwhite & Cox	2,473.00
L. P. Byrd	61.95
Standard Store Co.	18.50
Geo. L. Starks & Co.	55.99
E. E. Fridell	12.50
Greensboro Supply Co.	23.50
R. G. Farrell	2.25
Rocky Mount Steam Bakery Co.	3.20
Raeford Hardware Co.	164.47
The Home Furnishing Co.	37.10
R. W. Brown	35.99
Foss & Stradley	7.25
C. L. Hayes	2.70
Alexander Gilchrist	13.20
W. E. Logan	14.00
W. W. Morgan	22.75
Union Carbide Sales Co.	8.78
Greensboro Hardware Co.	4.00
Guilford Implement Co.	23.55
Griswoldville Manufacturing Co.	110.00
Western Union Telegraph Co.	.55
Standard Oil Co.	250.96
Jacob P. Wyatt & Son	12.30
Baker & Dunlap	193.26
Alderman Toy & China Co.	8.05
J. L. Bristow	12.50
R. W. King	5.50
S. S. Keeling	6.50
Washington Steam Bakery	149.16
Greensboro Loan & Trust Co.	56.25
Dr. L. B. McBrayer	399.71
Dr. P. P. McCain	166.66
Dr. S. W. Thompson	25.00

Miss Ruth Withers .....	\$10.00
H. G. Stephens.....	50.00
J. T. Ingram, Jr.....	30.00
J. W. Reid.....	2.69
J. A. Hearne.....	200.00
H. C. Bevan.....	40.00
Interest (on old accounts).....	655.10
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	\$16,427.74

## ANALYSIS.

Sundry Expense Accounts as per report, .....	\$ 41,831.39
Less Accounts prior to December 1, 1913, .....	6,184.89
Total Running Expenses from Dec. 1, 1913, to Nov. 30, 1914,....	35,646.50
Total Hospital days from Dec. 1, 1913, to Nov. 30, 1914,.....	20,821
Per Capita Cost, per day .....	\$1.71
Hospital days December 1, 1913, to May 31, 1914,.....	5,729
Receipts from Patients Dec. 1, 1913, to May 30, 1914,.....	\$5,606.37
Hospital days from June 1, 1914, to Nov. 30, 1914,.....	15,092
Receipts from Patients June 1, 1914, to Nov. 30, 1914.....	\$13,617.19

## ITEMIZED EXPENDITURES

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
1745	Hotel Equipment Co.	\$	1.25	Provisions.
			5.20	Crockery.
1746	Dulin & Martin		1.33	Crockery.
			13.00	Drugs—medicines.
1747	Burley & Co.		16.25	Drugs—medicines.
1748	Hotel Equipment Co.		9.00	Crockery.
			4.50	Drugs—medicines.
1749	Dulin & Martin		33.98	Crockery.
1750	Fayetteville Ice Mfg. Co.		80.58	Provisions.
1751	E. L. Keithan		7.00	Freight, express, misc.
1752	M. C. Brady		85.12	Provisions.
1753	Bramhall, Deane & Co.		3.24	Crockery.
1754	Alex Dunn		1.30	Fuel, light, water.
1755	William Estes		4.00	Freight, express, misc.
1756	E. W. Smith		1.40	Provisions.
1757				
1758	Vannie Smith		4.59	Laundry.
1759	Earnest Cain		5.00	Service, cooks, etc.
1760				
1761	Earnest Cain		38.66	Service, cooks, etc.
1762	M. C. Brady		78.65	Provisions.
1763	M. C. Brady		59.40	Provisions.
1764	Wakefield Farm		1.00	Farm expenses.
1765	J. L. Holmes		2.00	Provisions.
1766	Virgil Monroe		4.51	Farm expense.
1767	Henry McKay		3.25	Fuel, light, water.
1	Monroe Rowland	\$ 45.00		Service, cooks, etc.
	Earnest Cain	19.35		Service, cooks, etc.
	William Carlock	27.50		Service, cooks, etc.
	John C. Brown	25.00		Service, cooks, etc.
	Fletcher Reaves	24.19		Service, cooks, etc.
	Frank Harrison	25.00		Service, cooks, etc.
	John Graham	25.00		Service, cooks, etc.
	Lonnie Reeves	25.00		Service, cooks, etc.
2	J. A. Hearne	100.00		Farm expense.
3	Herbert Beran	73.34		Dairy.
4	J. C. Brown	67.50		Service, cooks, etc.
5	Fayetteville Steam Laundry	133.24		Laundry.
6	Dr. H. B. Hoyle	82.50		Salaries.
7	J. H. Culbreath & Co.	159.07		Provisions.
		59.40		Dairy.
8	Tyre Glenn	88.40		Salaries.
9	Musselwhite & Cox	500.00		Hospital.
10	Walter B. Olson	80.00		Service, cooks, etc.
11	Economy Silo Mfg. Co.	188.00		Silo.
12	F. A. Weston	165.07		Hospital.
13	Miss Mary A. Clark	37.31		Nurses and attendants.
14	Miss Rose Geiger	40.00		Nurses and attendants.
15	Miss Mary McCaffrey	40.00		Nurses and attendants.
16	Dr. Wilson Pendleton	166.66		Salaries.
17	Tyre Glenn	100.00		Salaries.
1768	Miss Mary Clark		22.69	Nurses and attendants.
18	Howard	68.50		Drugs—medicines.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
19	G. W. Ward.....	\$ 37.00	\$ .....	Dairy.
20	The Imperial Co.....	464.24	.....	Farm expense.
21	Armour & Co.....	66.56	.....	Provisions.
22	Armour & Co.....	25.48	.....	Provisions.
23	R. C. Williams & Co.....	54.28	.....	Provisions.
24	International Harvester Co.....	24.78	.....	Fuel, light, water.
		50.00	.....	Farm expense.
25	M. C. Brady.....	123.56	.....	Provisions.
26	Dr. H. B. Hoyle.....	75.00	.....	Salaries.
27	Musselwhite & Cox.....	500.00	.....	Hospital.
1	William Estes.....		4.00	Freight, express, misc.
28	Home Furnishing Co.....	10.00	.....	Equipment.
29	J. E. Covington.....	13.13	.....	Provisions.
		7.27	.....	Farm expense.
		19.65	.....	Dairy.
30	Private Est. Coffee Co.....	24.50	.....	Provisions.
31	J. S. Maultsby.....	19.17	.....	Provisions.
		.75	.....	Fuel, light, water.
		5.48	.....	Farm expense.
		12.70	.....	Dairy.
32	M. C. Brady.....	57.04	.....	Provisions.
33	Lee County Cotton Oil Co.....	160.00	.....	Dairy.
34	Page & Johnson.....	123.77	.....	Freight, express, misc.
2	Peoples Laundry.....		7.11	Laundry.
3	M. N. Sugg.....	9.00	.....	Repairs.
4	Catawba Creamery Co.....		7.00	Provisions.
5	W. L. Brogdon Co.....		19.59	Provisions.
6	Alfred Williams Co.....		6.98	Freight, express, misc.
7	National Biscuit Co.....		3.32	Provisions.
8	Alderman Toy & China Co.....		12.30	Provisions.
			20.65	Crockery.
9	Alex Dunn.....		24.05	Fuel, light, water.
10	Carroll Advertising & Letter Writing Co.....		19.20	Freight, express, telegraph, miscel.
35	Alderman Toy & China Co.....	41.02	.....	Equipment.
11	'Miss Mary A. Clark.....		3.60	Drugs—medicines.
12	Henry McKay.....		11.70	Fuel, light, water.
36	Dan A. Leslie.....	25.00	.....	Building and imprvmt.
37	Southern Express Co.....	32.62	.....	Freight, express, misc.
38	Scott & Co.....	27.30	.....	Provisions.
39	Swift & Co.....	35.16	.....	Provisions.
40	Fayetteville Ice Mfg. Co.....	22.60	.....	Provisions.
41	McNeill Bakery Co.....	21.60	.....	Provisions.
42	Royall & Borden Furniture Co.....	61.75	.....	Equipment.
25	Tyre Glenn.....		.75	Fuel, light, water.
			14.33	Drugs and medicines.
			27.00	Refunds to patients.
			1.50	Dairy.
26	W. S. Durham.....		9.60	Provisions.
43	W. M. Adams.....	825.00	.....	Hospital.
27	Lonnie Reaves.....		12.50	Service, cooks, etc.
44	Monroe Rowland.....	22.50	.....	Service, cooks, etc.
	Earnest Cain.....	12.50	.....	Service, cooks, etc.
	Will Cradock.....	13.75	.....	Service, cooks, etc.
	John Brown.....	12.50	.....	Service, cooks, etc.
	Fletcher Reaves.....	12.50	.....	Service, cooks, etc.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
	Frank Harrison.....	\$ 12.50	\$.....	Service, cooks, etc.
	John Graham.....	12.50	-----	Service, cooks, etc.
	Cary Harrison.....	10.83	-----	Service, cooks, etc.
45	Bramhall, Deane & Co.....	48.64	-----	Equipment.
46	Musselwhite & Cox.....	500.00	-----	Hospital.
47	M. C. Brady.....	52.60	-----	Provisions.
28	Tyre Glenn.....		10.00	Service, cooks, etc.
			10.46	Provisions.
			12.00	Freight, express, misc.
			1.35	Repairs.
			.50	Farm expense.
48	J. H. Culbreth & Co.....	49.06	-----	Provisions.
		39.36	-----	Dairy.
49	McNeill Bakery Co.....	12.80	-----	Provisions.
50	Catawba Creamery Co.....	198.50	-----	Provisions.
51	W. L. Brogdon & Co.....	25.63	-----	Provisions.
52	Tyre Glenn.....	100.00	-----	Salaries.
29	Vannie Smith.....		9.50	Service, cooks, etc.
30	Dr. W. S. Rankin.....		6.43	Incidentals.
31	Bank of Aberdeen.....		400.00	Bills payable.
32	Aberdeen Garage Co.....		1.00	Repairs.
33	Tyre Glenn.....		.85	Provisions.
			17.85	Fuel, light, water.
			2.95	Incidentals.
			5.85	Farm expense.
			10.00	Refund to patients.
			2.85	Dairy.
53	Alex. Dunn.....	30.87	-----	Fuel, light, water.
54	Standard Oil Co.....	91.90	-----	Fuel, light, water.
34	Dr. Edwin Gladman.....		18.00	Refund to patients.
35	Chas. H. Perry.....		7.00	Refund to patients.
36	Dr. Edwin Gladman.....		19.00	Refund to patients.
55	Dan Leslie.....	25.00	-----	Building and impvnts.
37	Buchanan Plumbing Co.....		14.00	Repairs.
38	Vannie Smith.....		2.50	Freight, express, misc.
			3.60	Laundry.
39	Sanford Ice & Fuel Co.....		4.00	Provisions.
40	Geo. C. Leash.....		35.00	Farm expense.
41	H. D. Phillips.....		9.00	Crockery.
42	W. L. Brogden Co.....		31.56	Provisions.
43	National Biscuit Co.....		2.78	Provisions.
44	Hotel Equipment Co.....		5.67	Furniture and crockery.
45	Miss Rose Geiger.....		40.00	Nurses and attendants.
46	Miss Mary McCaffrey.....		40.00	Nurses and attendants.
47	Henry McKay.....		22.10	Fuel, light, water.
56	Miss Mary A. Clark.....	60.00	-----	Nurses and attendants.
57	Dr. W. Pendleton.....	166.67	-----	Salaries.
58	Dr. H. B. Hoyle.....	75.00	-----	Salaries.
59	Walter B. Olson.....	75.00	-----	Service, cooks, etc.
60	American Heating Co.....	600.00	-----	Hospital.
61	Johnston Harvester Co.....	86.40	-----	Farm expenses.
62	N. C. Brady.....	52.20	-----	Provisions.
63	Bank of Aberdeen.....	111.25	-----	Service, cooks, etc.
64	Armour & Co.....	187.46	-----	Provisions.
65	Fayetteville Steam Laundry.....	223.65	-----	Laundry.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
48	Tyre Glenn.....	\$.....	\$ 15.00 3.00 2.30 9.10	Service, cooks, etc. Fuel, light, water. Freight, express, misc. Farm expense.
49	Fearless Dishwasher Co.....		9.00	Repairs.
50	Scott & Co.....		48.24	Provisions.
51	Fayetteville Ice Mfg. Co.....		45.35	Fuel, light, water.
52	J. W. Watkins.....		12.50	Refund to patients.
53	Miss Lena R. Sykes.....		36.00	Nurses and attendants.
66	Albert Pick & Co.....	120.87	.....	Equipment.
67	Albert Pick & Co.....	188.05	.....	Equipment.
68	J. H. Culbreth & Co.....	16.61 32.86	.....	Provisions. Dairy.
69	Swift & Co.....	60.02	.....	Provisions.
70	Miss Mary A. Clark.....	39.28	.....	Nurses and attendants.
71	Miss Rose Geiger.....	25.86	.....	Nurses and attendants.
72	Miss Mary McCaffrey.....	22.86	.....	Nurses and attendants.
73	Dr. W. Pendleton.....	95.24	.....	Salaries.
74	M. C. Brady.....	66.63	.....	Provisions.
76	Dan Leslie.....	20.00	.....	Buildings and impvmts.
54	Tyre Glenn.....		27.05	Freight, express, misc.
55	Walter Bolson.....		20.10	Freight, express, misc.
56	Tyre Glenn.....		5.00 1.25 10.73 5.00	Service, cooks, etc. Provisions. Freight, express, misc. Refund to patients.
75	The McNeill Bakery.....	20.00	..... 2.81	Provisions. Drugs—medicines.
77	Miss Annie L. Griffin.....	20.60	.....	Nurses and attendants.
78	Miss Lillian M. Cox.....	20.60	.....	Nurses and attendants.
57	Alex Dunn.....		21.45	Freight, express, misc.
58	White Ice Cream Co.....		3.40	Provisions.
59	Dr. Chas. O'H. Laughinghouse.....		23.45	Director's expenses.
60	A. E. Rankin Co.....		7.10	Incidentals.
79	Page Trust Co.....	107.90	.....	Service, cooks, etc.
80	J. M. Culbreth & Co.....	53.48 32.80	.....	Provisions. Dairy.
61	Tyre Glenn.....		5.45 1.75	Freight, express, misc. Incidentals.
81	F. W. Woods & Sons.....	36.75	.....	Farm expense.
82	Peoples Laundry.....	36.74	.....	Laundry.
62	Fannie Smith.....		16.00	Service, cooks, etc.
63	William Estes.....		8.00	Freight, express, misc.
64	Dobbin-Ferrall Co.....		13.50	Crockery.
65	Page Trust Co.....		100.00	Bills payable.
66	E. B. Long.....		19.00	Refund to patients.
67	Dr. J. R. Gordon.....		5.10	Director's expenses.
68	Aberdeen Wholesale Groc. Co.....		2.57	Drugs—medicines.
69	A. E. Ward.....		30.00	Farm expense.
70	McLean Grocery Co.....		5.55 .15	Provisions. Freight, express, misc.
71	David Knight.....		30.00	Farm expense.
72	M. T. Goodwin.....		8.40	Provisions.
83	W. M. Adams.....	390.65	.....	Hospital.
84	W. M. Adams.....	508.89	.....	Buildings and impvmts.
85	Miss Minnie Overstreet.....	78.40	.....	Nurses and attendants.
86	Miss Gertrude Petteway.....	78.40	.....	Nurses and attendants.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
87	Miss Hattie Lowry.....	\$ 81.40	\$.....	Nurses and attendants.
88	W. B. Olson.....	75.00	.....	Service, cooks, etc.
89	Tyre Glenn.....	100.00	.....	Salaries.
90	Page Trust Co.....	125.68	.....	Service, cooks, etc.
91	Dr. H. B. Hoyle.....	75.00	.....	Salaries.
92	R. C. Williams & Co.....	115.74	.....	Provisions.
93	Private Estate Coffee Co.....	30.75	.....	Provisions.
73	Carters Pharmacy.....		200.00	Drugs—medicines.
74	Tyre Glenn.....		26.05	Freight, express, misc.
			2.50	Incidentals.
			6.85	Farm expense.
			4.00	Refund to patients.
75	Alex Dunn.....		9.10	Fuel, light, water.
94	American Heating Co.....	319.63	.....	Hospital.
77	D. C. Pool.....		18.00	Refund to patient.
78	W. L. Brogden Co.....		74.75	Provisions.
95	Armour & Co.....	137.25	.....	Provisions.
96	Swift & Co.....	52.80	.....	Provisions.
97	J. H. Culbreth & Co.....	46.49	.....	Provisions.
		12.00	.....	Farm expense.
98	Greensboro Hardware Co.....	167.50	.....	Equipment.
100	H. C. Beran.....	80.00	.....	Dairy.
101	St. Clair Allen Co.....	152.88	.....	Equipment.
79	H. C. Beran.....		40.00	Dairy.
80	Fayetteville Mfg. Co.....		48.50	Fuel, light, water.
81	Fayetteville Mfg. Co.....		28.97	Provisions.
			8.52	Fuel, light, water.
102	Page Trust Co.....	171.73	.....	Provisions.
		5.45	.....	Freight, express, miscel.
82	Tyre Glenn.....		15.10	Freight, express, miscel.
103	Musselwhite & Cox.....	360.00	.....	Building and impvmt.
83	Scott & Co.....		42.00	Provisions.
84	Tyre Glenn.....		10.00	Nurses and attendants.
			8.35	Service, cooks, etc.
			5.95	Provisions
			6.50	Crockery.
			22.75	Freight, express, miscel.
			5.00	Dairy.
			6.66	Building and impvmt.
104	Page Trust Co.....	123.75	.....	Service, cooks, etc.
105	The Peabody Drug Co.....	63.76	.....	Drugs-medicines.
106	Fayetteville Steam Laundry.....	159.76	.....	Laundry.
107	M. C. Brady.....	76.28	.....	Provisions.
108	M. C. Brady.....	80.75	.....	Provisions.
85	E. L. Keithan, Postmaster.....		21.36	Stamps.
86	Miss V. D. Woodie.....		15.00	Nurses and attendants.
109	W. M. Adams.....	50.00	.....	Building and impvmts.
110	W. M. Adams.....	182.00	.....	Building and impvmts.
		85.00	.....	Hospital
111	W. M. Adams.....	65.00	.....	Repair.
112	Miss V. D. Woodie.....	110.00	.....	Nurses and attendants.
113	Rock Hill Buggy Co.....	67.50	.....	Dairy.
114	Tyre Glenn.....	100.00	.....	Salaries.
87	S. A. L. Railway.....		33.48	Freight, express, miscel.
88	Mary Monroe.....		8.00	Service, cooks, etc.
89	J. Van Lindley Co.....		31.83	Farm expense.
90	Henry McKay.....		26.65	Fuel, light, Water.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
91	James Shelley.....	\$.....	\$ 73.31	Dairy.
92	A. E. Ward.....		30.00	Farm expense.
93	Thomas Reynolds.....		14.67	Farm expense.
94	W. N. Brown.....		33.00	Fuel, light, water.
115	Peoples House Furnishing Co....	787.75		Equipment.
116	G. W. Baker Linen Co.....	433.35		Equipment.
95	Dan Leslie.....		13.44	Building and impvmt.
96	Edgar Riley.....		6.60	Provisions.
97	The Southern Cotton Oil Co.....		22.57	Dairy.
117	Miss Myrtle Isley.....	145.00		Nurses and attendants.
118	Miss Elizabeth Connally .....	95.00		Nurses and attendants.
119	Dr. P. P. McCain.....	166.66		Salaries.
120	Dr. H. B. Hoyle.....	75.00		Salaries.
121	W. B. Olson.....	75.00		Service, cooks, etc.
98	Dr. J. E. Brooks.....		32.10	Director's expenses.
122	Dr. W. O. Spencer.....	34.30		Director's expenses.
123	Dr. Thomas E. Anderson.....	28.50		Director's expenses.
124	Dr. J. Howell Way .....	36.20		Director's expenses.
125	Dr. E. J. Wood.....	12.85		Director's expenses.
126	J. W. Scott & Co.....	62.65		Crockery.
99	Tyre Glenn.....		5.00	Nurses and attendants.
			6.75	Service, cooks, etc.
			.50	Provisions.
			.90	Fuel, light, water.
			6.75	Freight, express, misc.
			4.75	Farm expense.
			5.00	Dairy.
100	American Medical Association.....		5.00	Freight, express, miscel.
101	American Journal Pub. Health.....		3.00	Miscellaneous.
102	Tuttle Morehouse & Taylor Co.....		35.50	Drugs—medicines.
103	William Estes.....		4.00	Freight, express, miscel.
104	J. G. Ball & Co.....		60.65	Provisions.
105	J. E. Covington.....		10.20	Provisions.
			.45	Farm expense.
106	D. J. Gillis.....		1.60	Provisions.
127	W. C. Kirkman.....	10.00		Hospital.
128	R. B. Langley.....	10.00		Hospital.
129	C. E. Brewer.....	8.75		Hospital.
130	E. A. Overby.....	7.00		Hospital.
131	Lawson Henderson.....	11.25		Hospital.
107	National Biscuit Co.....		9.89	Provisions.
108	The McNeil Bakery.....		55.15	Provisions.
109	Alderman Toy & China Co.....		7.31	Freight, express, miscel.
			15.33	Dairy.
132	John T. Hunt & Co.....	1,549.38		Hospital.
133	Armour & Co.....	179.73		Provisions.
134	Neill McGill.....	74.59		Provisions.
135	J. A. Hearne.....	200.00		Farm expense.
110	Vannie Smith.....		16.00	Service, cooks, etc.
111	W. L. Brogden Co.....		99.51	Provisions.
112	Scott & Co.....		45.63	Provisions.
113	Southern Express Co.....		57.71	Freight, express, miscel.
114	A. Dughi.....		3.25	Provisions.
136	Miss Myrtle Isley.....	35.00		Nurses and attendants.
115	Miss Lula Medlin.....		3.50	Refund to patients.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
116	Tyre Glenn .....	\$-----	\$ 15.00 8.00 10.20 8.50 7.29	Nurses and attendants. Service, cooks, etc. Provisions. Freight, express, miscel. Farm expense.
137	E. C. Mendenhall.....	200.00	7.00	Refund to patients.
137	E. C. Mendenhall.....	404.00		Dairy.
138	Albert Pick & Co.....	68.91		Equipment.
139	J. S. Maultsby:.....	4.00 .62 57.50		Provisions. Crockery. Farm expense. Dairy.
140	Page Trust Co.....	118.75		Service, cooks, etc.
117	The T. & Jones Buggy Co. ....		5.00	Repairs.
141	Hoke Oil & Fertilizer Co. ....	61.92		Dairy.
142	Hoke Mercantile Co. ....	57.25		Dairy.
118	William M. Wilson's Sons.....		100.03	Crockery.
119	Sydnor Pump & Well Co. ....		1.92	Fuel, light, water.
120	McLean Grocery Co. ....		17.05	Provisions.
121	Timberland Grocery Co. ....		21.60	Farm expense.
143	E. O. Overby.....	20.25		Hospital.
144	Lawson Henderson.....	20.68		Hospital.
145	C. E. Brewer.....	27.87		Hospital.
122	T. W. Wood & Son.....		6.40	Farm expense.
146	Swift & Co. ....	194.46		Provisions.
124	Miller Rhodes & Swarts.....		4.93	Crockery.
125	J. H. Culbreth & Co. ....		92.66	Provisions.
			11.83	Dairy.
147	Miss Elizabeth Connally .....	95.00		Nurses and attendants.
126	Sanford Sash & Blind Co. ....		55.07	Repairs.
127	The E. W. Ross Co. ....		13.60	Farm expense.
128	Standard Oil.....		86.25	Fuel, light, water.
148	Peoples Laundry.....	82.84		Laundry.
129	Howard.....		34.30	Drugs—medicines.
130	Armour & Co. ....		172.91	Provisions.
131	Swift & Co. ....		57.13	Provisions.
132	Tyre Glenn.....		10.87	Service, cooks, etc.
			13.74	Provisions.
			1.50	Fuel, light, water.
			16.05	Freight, express, miscel.
			2.25	Incidentals.
			2.60	Farm expense.
133	A. & R. Railroad Co. ....		9.12	Freight.
135	Swift & Co. ....		13.44	Provisions.
134	The Patterson Co. ....		98.78	Farm expense.
136	Hagan China Store.....		24.70	Dairy.
149	Page Trust Co. ....	247.50		Service, cooks, etc.
137	W. B. Olson.....		17.00	Service, cooks, etc.
150	W. B. Olson.....	75.00		Service, cooks, etc.
151	Dr. H. B. Hoyle.....	75.00		Salaries.
152	Dr. P. P. McCain.....	166.67		Salaries.
153	Tyre Glenn.....	100.00		Salaries.
154	Thomas Randall.....	20.00		Farm expense.
155	H. C. Beran.....	40.00		Dairy.
156	James Shelley.....	30.00		Dairy.
157	Page & Johnson.....	105.00		Insurance.
158	Miss Elizabeth Connally .....	35.00		Nurses and attendants.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
159	M. C. Brady.....	\$ 78.75	\$.....	Provisions.
160	Dr. L. B. McBrayer.....	250.00	.....	Salaries.
161	Miss A. B. Coffin.....	56.70	.....	Nurses and attendants.
162	Dr. L. B. McBrayer.....	37.05	.....	Traveling expenses.
163	J. W. Reid.....	57.00	.....	Fuel, light, water.
164	J. S. Maultsby, auto.....	200.00	.....	Equipment.
165	American Heating Co.....	720.00	.....	Equipment.
138	Vannie Smith.....	.....	16.00	Service, cooks, etc.
139	B. A. Hardester.....	.....	6.00	Farm expense.
140	Dr. P. P. McCain.....	.....	25.00	Nurses and attendants.
			1.35	Freight, expense, miscel.
			20.00	Refund to patients.
166	W. B. Olson.....	5.10	.....	Provisions.
167	M. C. Brady.....	48.00	.....	Provisions.
168	Void.....	.....	.....	.....
141	J. W. Pendegast.....	.....	3.40	Provisions.
142	T. P. Brown.....	.....	5.20	Traveling expense.
169	Miss Frances Wilson .....	40.65	.....	Salaries.
170	Miss Elizabeth Chamberlain.....	58.00	.....	Nurses and attendants.
171	Walter B. Olson Stewart.....	142.75	.....	Service, cooks, etc.
143	Armour & Co.....	.....	258.95	Provisions.
144	Swift & Co.....	.....	223.32	Provisions.
145	M. C. Brady.....	.....	40.80	Provisions.
146	W. H. Baldwin, Treasurer.....	.....	5.00	Freight, express, miscel.
147	J. A. Hearne.....	.....	3.90	Farm expense.
148	North Carolina Sanatorium.....	.....	32.02	Provisions.
			14.16	Freight, express, miscel.
			35.50	Refund to patients.
			1.60	Auto.
172	W. B. Olson.....	135.41	.....	Service, cooks, etc.
173	J. A. Hearne.....	100.00	.....	Farm expense.
174	H. C. Beran.....	40.00	.....	Dairy.
175	James Shelley.....	30.00	.....	Dairy.
176	Dr. L. B. McBrayer.....	250.00	.....	Salaries.
177	Dr. P. P. McCain.....	166.66	.....	Salaries.
178	Dr. H. B. Hoyle.....	75.00	.....	Salaries.
179	Miss A. Blanche Coffin.....	60.00	.....	Nurses and attendants.
180	Thomas Reynolds.....	20.00	.....	Farm expense.
181	J. W. Reid.....	10.00	.....	Fuel, light, water.
182	E. L. White.....	10.00	.....	Nurses and attendants.
183	H. G. Stephens.....	25.00	.....	Salaries.
184	Walter B. Olson.....	75.00	.....	Service, cooks, etc.
185	Miss Carrie Weisner.....	14.35	.....	Nurses and attendants.
186	Miss Bertha Sheilds.....	7.50	.....	Nurses and attendants.
187	Dr. L. B. McBrayer.....	71.63	.....	Traveling expense.
188	Dr. J. R. Gordan.....	200.00	.....	Equipment.
189	N. J. Archer.....	15.00	.....	Equipment.
190	T. P. Brown.....	4.45	.....	Traveling expense.
149	Dr. R. A. Vaughn.....	.....	12.50	Refund to patients.
150	S. A. Smith.....	.....	11.75	Refund to patients.
151	C. P. Whitehead.....	.....	12.60	Refund to patients.
152	L. R. Lyon.....	.....	18.50	Refund to patients.
101	Lillie Leslie.....	12.00	.....	Service, cooks, etc.
192	Tyre Glenn.....	100.00	.....	Salaries.
153	J. S. Maultsby.....	.....	.55	Provisions.
			14.50	Farm expense.
				Dairy.

## NORTH CAROLINA BOARD OF HEALTH

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
154	Scott & Co.....	\$ .....	\$ 44.10	Provisions.
155	Swift & Co.....		213.14	Provisions.
156	Armour & Co.....		244.70	Provisions.
157	The McNeill Bakery Co.....		46.93	Provisions.
158	Private Estate Coffee Co.....		24.50	Provisions.
159	W. L. Brogden & Co.....		90.48	Provisions.
160	American Surety Co. of N. Y.....		5.00	Hospital drugs—medicines.
161	J. H. Culbreth & Co.....		65.25	Provisions.
162	Standard Oil Co.....		38.33	Fuel, light, water.
163	National Biscuit Co.....		5.83	Provisions.
164	Western Union Telegraph Co.....		4.48	Freight, express, miscel.
165	A. & R. Railroad Co.....		28.02	Freight.
166	S. A. L. Railway Co.....		38.94	Freight.
167	Norfolk & Southern R. R. Co.....		25.86	Freight.
168	Southern Express Co.....		79.43	Express.
169	H. W. Baker Linen Co.....	430.41	-----	Equipment.
170	Page Trust Co.....		45.75	Interest.
171	W. S. West, receiver.....		29.60	Laundry.
172	Fayetteville Steam Laundry.....		60.02	Laundry.
173	Adams Grain & Provision Co.....		133.37	Dairy.
174	J. W. Blue.....		8.05	Ice.
175	Laura B. Blue.....		2.02	Provisions.
176	W. L. Brogden Co.....		67.28	Provisions.
177	J. H. Culbreth & Co.....		86.54	Provisions.
178	W. H. Estes.....		76.70	Dairy.
179	Fayetteville Ice & Manufac. Co.....		5.00	Freight, express, miscel
180	The Gregg Co.....		65.18	Ice.
181	Hotel Equipment Co.....		5.75	Provisions.
182	The McNeill Bakery Co.....		27.00	B. H. and kitchen equip.
183	National Biscuit Co.....		83.28	Provisions.
184	Neill McGill.....		5.78	Provisions.
185	Private Estate Coffee Co.....		21.01	Provisions.
186	The Peabody Drug Co.....		24.50	Provisions.
187	Standard Oil Co.....		9.26	Drugs—medicines.
188	Western Union Telegraph Co.....		39.23	Fuel, light, water.
189	T. W. Wood & Sons.....		1.00	Expense.
190	Alfred Williams & Co.....		1.60	Farm expense.
191	R. C. Williams & Co.....		4.92	Office supplies.
192	W. F. McDade.....		149.29	Provisions.
193	M. D. Hester.....		7.35	Refund to patients.
194	J. Bryan Grimes.....		22.00	Refund to patients.
195	J. S. Maultsby.....		5.00	Auto expense.
196	Dr. P. P. McCain.....	166.66	-----	Provisions.
197	Dr. H. B. Hoyle.....	75.00	-----	Salaries.
198	H. G. Stephens.....	50.00	-----	Salaries.
199	W. B. Olson.....	75.00	-----	Service, cooks, etc.
200	Dr. L. B. McBrayer.....	250.00	-----	Salaries.
201	J. H. Hearne.....	100.00	-----	Farm expense.
202	H. C. Beran.....	40.00	-----	Dairy.
203	James Shelly.....	30.00	-----	Dairy.
204	Thomas Reynolds.....	20.00	-----	Farm expense.
	J. W. Reid.....	10.00	-----	Fuel, light, water.
	E. L. White.....	10.00	-----	Nurses and attendants.

## FIFTEENTH BIENNIAL REPORT

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## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
205	W. B. Olson, Steward.....	\$ 298.00	\$.....	Service, cooks, etc.
206	W. B. Olson, Expert Accountant.....	15.10	.....	Traveling expense.
207	Miss A. B. Coffin.....	60.00	.....	Nurses and attendants.
208	Miss Elizabeth Connally.....	50.00	.....	Nurses and attendants.
209	Miss E. J. McIntosh.....	85.00	.....	Nurses and attendants.
210	Miss Annie Nicholson.....	10.00	.....	Nurses and attendants.
211	Miss Nannie Jones.....	6.33	.....	Nurses and attendants.
212	Miss Clara Nanny.....	5.33	.....	Nurses and attendants.
213	Dr. L. B. McBrayer.....	13.15	.....	Traveling expense.
214	Miss Bertha Shields.....	10.00	.....	Nurses and attendants.
215	Miss Carrie Weisner.....	8.33	.....	Nurses and attendants.
195	M. C. Brady.....	59.00	.....	Accounts payable.
196	M. C. Brady.....	56.70	.....	Accounts payable.
197	M. C. Brady.....	53.57	.....	Accounts payable.
216	Miss Annie Nicholson.....	2.20	.....	Nurses and attendants.
217	Lillie Leslie.....	12.00	.....	Service, cooks, etc.
218	J. L. Bristow.....	20.00	.....	Equipment.
219	Dr. P. P. McCain.....	.48	.....	Hospital supplies.
		4.50	.....	Refund to patients.
		3.29	.....	Telephone and Teleg.
		.25	.....	Auto expense.
198	Adams Grain & Provisions Co.....	65.88	.....	Accounts payable.
199	Alderman's Wholesale Confecc.....	17.66	.....	Accounts payable.
200	Armour & Co.....	268.86	.....	Accounts payable.
201	W. L. Brogden Co.....	70.32	.....	Accounts payable.
202	J. H. Culbreth & Co.....	71.07	.....	Accounts payable.
203	Scott & Co.....	50.40	.....	Accounts payable.
204	Pine Crest Farm.....	18.90	.....	Accounts payable.
205	Private Estate Coffee Co.....	30.75	.....	Accounts payable.
206	Swift & Co.....	150.72	.....	Accounts payable.
207	Sam Hoyle.....	1.50	.....	Accounts payable.
208	Western Union Telegraph Co.....	2.15	.....	Accounts payable.
209	M. C. Brady.....	30.00	.....	Accounts payable.
210	Smith-Wadsworth Hardware Co.....	22.10	.....	Accounts payable.
211	A. & R. Railway Co.....	2.08	.....	Accounts payable.
212	J. S. Maultsby.....	165.01	.....	Accounts payable.
213	McNeill Bakery Co.....	59.28	.....	Accounts payable.
214	Pratt & Baker.....	126.80	.....	Accounts payable.
215	M. Frank Lancaster.....	15.00	.....	Refund to patients.
216	Scott & Co.....	50.40	.....	Accounts payable.
220	W. F. Jordan.....	30.00	.....	Salaries.
221	James E. Theim.....	8.50	.....	Accounts payable.
222	H. S. Starr Co.....	3.00	.....	Accounts payable.
217	S. A. L. Railway Co.....	26.12	.....	Accounts payable.
218	North Carolina Sanatorium.....	107.66	.....	Provisions.
		20.05	.....	Stamps, miscellaneous.
		2.95	.....	Hospital supplies.
		3.80	.....	Telephone and teleg.
219	Everett Simmons.....	12.00	.....	Refund to patients.
220	H. M. Cole.....	9.00	.....	Refund to patients.
223	H. W. Baker Linen Co.....	108.00	.....	Accounts payable.
221	Armour & Co.....	33.66	.....	Accounts payable.
222	Aberdeen Wholesale Groc. Co.....	6.40	.....	Accounts payable.
223	J. W. Blue.....	43.70	.....	Accounts payable.
224	Clipless Paper Fastener Co.....	3.50	.....	Accounts payable.
225	Fayetteville Ice Manufact. Co.....	27.57	.....	Accounts payable.
226	Huske Hardware Co.....	1.12	.....	Accounts payable.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
227	L. L. Johnson.....	\$ .	\$ 5.00	Accounts payable.
228	Johnson Garage & Machine Co. ....		.50	Accounts payable.
			19.10	Accounts payable.
229	David Knight.....		5.35	Accounts payable.
230	Hugh A. Keith.....		8.55	Accounts payable.
231	McLaughlin Co. ....		2.64	Accounts payable.
			3.78	Accounts payable.
232	Scott & Co. ....		12.60	Accounts payable.
233	Swift & Co. ....		100.95	Accounts payable.
234	Swindell Barnes Co. ....		1.50	Accounts payable.
235	T. M. Sharp.....		4.00	Accounts payable.
236	Southern Stamp & Stationery Co. ....		11.28	Accounts payable.
237	Standard Oil Co. ....		78.65	Accounts payable.
238	James E. Theim.....		2.00	Accounts payable.
239	Claud Baker.....		6.75	Dairy.
240	Fayetteville Steam Laundry.....		84.82	Accounts payable.
241	F. C. Elliott.....		18.00	Refund to patients.
242	Page Trust Co. ....		311.20	Accounts payable.
243	News & Observer.....		1.80	Miscellaneous.
244	M. C. Brady.....		104.70	Accounts payable.
245	Tucker Building Pharmacy.....		8.50	Accounts payable.
246	Moore Grocery Co. ....		24.42	Accounts payable.
247	Peoples Laundry.....		30.03	Accounts payable.
			45.10	Accounts payable.
248	North Carolina Sanatorium.....		73.41	Provisions.
			1.15	Office supplies.
			2.75	Fuel, light, water.
			16.00	Stamps, miscellaneous.
			1.35	Hospital supplies.
			7.80	Telephone and teleg.
			9.00	Dairy.
224	Dr. L. B. McBrayer.....	250.00	.....	Salaries.
225	Dr. P. P. McCain.....	166.66	.....	Accounts payable.
226	Dr. H. B. Hoyle.....	75.00	.....	Accounts payable.
227	H. G. Stephens.....	50.00	.....	Accounts payable.
228	Mrs. W. F. Jordan.....	30.00	.....	Accounts payable.
229	Miss A. B. Coffin.....	60.00	.....	Nurses and attendants.
230	Miss Elizabeth Conally.....	50.00	.....	Nurses and attendants.
231	Miss Clara Nanny.....	10.00	.....	Nurses and attendants.
232	Miss Bertha Shields.....	10.00	.....	Nurses and attendants.
233	Miss Jennie Jones.....	10.00	.....	Nurses and attendants.
234	J. A. Hearne.....	100.00	.....	Farm expense.
235	H. C. Beran.....	40.00	.....	Dairy.
236	James Shelley.....	30.00	.....	Dairy.
237	Thomas Randall.....	25.00	.....	Farm expense.
238	J. W. Reid.....	10.00	.....	Fuel, light, water.
239	Ed. Emery.....	5.00	.....	Nurses and attendants.
240	Lillie Leslie.....	12.00	.....	Service, cooks, etc.
241	Walter B. Olson.....	75.00	.....	Service, cooks, etc.
242	Walter B. Olson, Steward.....	353.31	.....	Service, cooks, etc.
243	Miss E. J. McIntosh.....	33.33	.....	Nurses and attendants.
244	Dr. L. B. McBrayer.....	2.70	.....	Traveling expense.
249	Page Trust Co. ....		2.50	Interest.
250	Moore Grocery Co. ....		21.24	Accounts payable.
251	C. R. Kennedy.....		36.86	Accounts payable.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
252	Geo. C. Murphey & Co.	\$-----	\$ 3.00	Accounts payable.
253	B. A. Hardester.		16.00	Accounts payable.
254	W. R. Koontz.		42.92	Accounts payable.
245	John F. Hunt & Co.	17.57 1,235.82	-----	Accounts payable. Accounts payable.
255	M. C. Brady.		117.45	Accounts payable.
256	M. C. Brady.		100.90	Accounts payable.
257	W. R. West, Receiver.		62.04	Accounts payable.
258	Fayetteville Steam Laundry.		90.92	Accounts payable.
259	Pratt & Baker.		235.23	Accounts payable.
260	Armour & Co.		293.41	Accounts payable.
261	Adams Grain & Provision Co.		94.92	Accounts payable.
262	A. & R. Railway Co.		20.97	Accounts payable.
263	W. K. Brogden Co.		49.31	Accounts payable.
264	J. H. Culbreth & Co.		168.21	Accounts payable.
265	The McNeill Bakery Co.		77.27	Accounts payable.
266	J. S. Maultsby.		71.38	Accounts payable.
267	Boyd Peele & Bro.		21.70	Accounts payable.
268	Scott & Co.		74.70	Accounts payable.
269	Swift & Co.		11.93	Accounts payable.
270	Swift & Co.		452.30	Accounts payable.
271	Standard Oil Co.		105.57	Accounts payable.
272	A. L. Vann.		12.08	Accounts payable.
273	Moore Grocery Co.		21.24	Accounts payable.
274	M. C. Brady.		199.60	Accounts payable.
275	Dr. P. P. McCain.		3.55	Refund to patients.
276	North Carolina Sanatorium.		95.26	Provisions.
			1.25	Fuel, light, water.
			16.00	Stamps, miscellaneous.
			5.40	Hospital supplies.
			16.00	Refund to patients.
			6.00	Nurses and attendants.
			3.25	Telephone and teleg.
			1.48	D. R. and kitchen equip.
			2.00	Auto express.
247	Dr. L. B. McBrayer.	250.00	-----	Salaries.
246	Miss A. B. Coffin.	78.00	-----	Nurses and attendants.
248	Dr. P. P. McCain.	186.66	-----	Salaries.
249	Dr. H. B. Hoyle.	75.00	-----	Salaries.
250	H. G. Stephens.	50.00	-----	Salaries.
251	Miss A. O. Cox.	7.00	-----	Salaries.
252	Miss Elizabeth Connally.	50.00	-----	Nurses and attendants.
253	Miss E. J. McIntosh.	57.50	-----	Nurses and attendants.
254	Miss Bertha Shields.	10.00	-----	Nurses and attendants.
255	Miss Nannie Jones.	18.25	-----	Nurses and attendants.
256	Miss Clara Nanny.	15.45	-----	Nurses and attendants.
257	James Shelley.	30.00	-----	Dairy.
258	H. C. Beran.	40.00	-----	Dairy.
259	Thomas Randall.	18.00	-----	Farm.
260	J. A. Hearne.	100.00	-----	Farm.
261	Lillie Leslie.	12.00	-----	Service, cooks, etc.
262	J. W. Reid.	10.00	-----	Fuel, light, water.
263	North Carolina Sanatorium (W. B. Olson).	75.00	-----	Service, cooks, etc.
264	North Carolina Sanatorium.	330.00	-----	Service, cooks, etc.
277	Fayetteville Ice & Mfg. Co.		29.60	Accounts payable.
278	J. W. Blue.		44.38	Accounts payable.

## NORTH CAROLINA BOARD OF HEALTH

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
279	Pine Crest Farm.....	\$.....	\$ 16.42	Accounts payable.
280	The Peabody Drug Co.....		41.81	Accounts payable.
281	S. A. L. Railway Co.....		11.94	Accounts payable.
282	Peoples Laundry.....		66.20	Accounts payable.
283	Moore Grocery Co.....		42.43	Accounts payable.
284	M. C. Brady.....		106.97	Accounts payable.
285	A. & R. Railway Co.....		7.56	Accounts payable.
286	Southern Express Co.....		78.35	Accounts payable.
287	Western Union Telegraph Co.....		9.00	Accounts payable.
288	Page Trust Co.....		3.73	Interest.
289	The Inland Press.....		1.07	Accounts payable.
290	Raeford Hardware Co.....		2.21	Accounts payable.
291	Southern Express Co.....		54.19	Accounts payable.
292	Southern Express Co.....		13.74	Accounts payable.
293	Melton Kearnes.....		18.75	Accounts payable.
294	Moses Davis.....		8.00	Accounts payable.
295	J. A. Hearnes.....		6.75	Accounts payable.
296	J. S. Maultsby.....		9.87	Accounts payable.
297	Noah Clark.....		6.25	Accounts payable.
298	Lewis McBrayer.....		6.75	Accounts payable.
299	Walter Smith.....		3.25	Accounts payable.
300	Fayetteville Steam Laundry.....		39.74	Accounts payable.
265	William Lambert.....	20.00		Service, cooks, etc.
266	Dr. L. B. McBrayer.....	23.55		Traveling expense.
301	Pratt & Baker.....		448.37	Accounts payable.
302	W. R. Koontz.....		31.89	Accounts payable.
303	Stone & Forsyth.....		81.30	Accounts payable.
			8.85	Accounts payable.
304	M. C. Brady.....		115.62	Accounts payable.
305	J. S. Maultsby.....		51.80	Accounts payable.
306	D. E. Featherstone.....		9.40	Refund to patients.
307	Postal Telegraph Co.....		.25	Accounts payable.
308	M. D. Stockton.....		20.00	Refund to patients.
309	Armour & Co.....		274.19	Accounts payable.
310	Swift & Co.....		173.00	Accounts payable.
311	W. L. Brogden & Co.....		23.25	Accounts payable.
312	J. H. Culbreth & Co.....		132.37	Accounts payable.
313	Pine Crest Farm.....		20.00	Accounts payable.
267	Walter McClarkin.....	17.50		Service, cooks, etc.
268	Dr. L. B. McBrayer.....	250.00		Salaries.
269	Dr. P. P. McCain.....	166.66		Salaries.
270	Dr. S. W. Thompson.....	25.00		Salaries.
271	Miss Ruth Withers.....	27.00		Salaries.
272	H. G. Stephens.....	50.00		Salaries.
273	J. A. Hearne.....	100.00		Farm expense.
274	H. C. Beran.....	40.00		Dairy.
275	James Shelley.....	30.00		Dairy.
276	J. W. Reid.....	10.00		Fuel, light, water.
277	Miss Elizabeth Connally.....	50.00		Nurses and attendants.
278	Miss E. J. McIntosh.....	50.00		Nurses and attendants.
279	Miss Clara Nannie.....	1.50		Laundry.
		10.00		Nurses and attendants.
280	Miss Bertha Shields.....	10.00		Nurses and attendants.
281	Miss Annie Moore.....	10.00		Nurses and attendants.
282	Miss Vennie Jones.....	5.65		Laundry.
		10.00		Nurses and attendants.
283	Lillie Leslie.....	12.00		Service, cooks, etc.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
284	North Carolina Sanatorium	\$ 335.00	\$ 5.00	Service, cooks, etc.
314	North Carolina Sanatorium	-----	64.64	Service, cooks, etc.
			.35	Provisions.
			6.36	Office supplies.
			2.23	Telephone and teleg.
			4.50	Pump repairs.
			6.75	Dairy.
			4.00	Refund to patients.
			1.40	Laundry.
			5.00	Hospital supplies.
			18.00	Hospital improvements.
			2.90	Stamps.
315	Gulf Refining Co.	-----	105.17	Auto expense.
316	Page Trust Co.	-----	22.95	Accounts payable.
317	McNeill Bakery Co.	-----	102.08	Interest.
318	Johnson Garage & Machine Co.	-----	34.40	Accounts payable.
319	J. S. Maultsby	-----	13.38	Accounts payable.
320	Western Union Telegraph Co.	-----	2.37	Accounts payable.
321	Southern Express Co.	-----	38.79	Accounts payable.
322	Private Estate Coffee Co.	-----	29.00	Accounts payable.
323	The Gregg Co.	-----	5.75	Accounts payable.
324	A. & R. Railway Co.	-----	6.37	Accounts payable.
325	Catawba Creamery Co.	-----	54.00	Accounts payable.
326	J. H. Culbreth & Co.	-----	153.92	Accounts payable.
327	W. L. Brogden Co.	-----	84.26	Accounts payable.
328	M. C. Brady	-----	114.23	Accounts payable.
329	C. W. Antrim & Sons	-----	84.17	Accounts payable.
330	Peoples Laundry Co.	-----	57.83	Accounts payable.
331	Thomas H. Briggs & Sons	-----	3.00	Accounts payable.
332	Scott & Co.	-----	67.20	Accounts payable.
333	National Biscuit Co.	-----	3.10	Accounts payable.
334	A. L. Vann	-----	29.25	Accounts payable.
335	William W. Wilson's Sons	-----	133.83	Accounts payable.
285	McCray Refrigerator Co.	485.00	-----	Accounts payable.
336	M. C. Brady	-----	103.79	Accounts payable.
337	W. F. Brown	-----	10.40	Hospital supplies.
338	Swift & Co.	-----	2.20	Accounts payable.
339	Swift & Co.	-----	14.51	Accounts payable.
340	Swift & Co.	-----	83.56	Accounts payable.
341	Adam Grain & Provision Co.	-----	26.24	Accounts payable.
347	The McNeill Bakery Co.	-----	106.08	Accounts payable.
343	Pratt & Baker	-----	73.57	Accounts payable.
344	Standard Oil Co.	-----	102.28	Accounts payable.
345	Scott & Co.	-----	66.99	Accounts payable.
346	Miss Sallie Corbett	-----	6.00	Refund to patients.
347	J. T. White & Co.	-----	2.50	Accounts payable.
348	Gulf Refining Co.	-----	2.25	Accounts payable.
349	Fayetteville Ice & Mfg. Co.	-----	139.91	Accounts payable.
350	Columbia Laundry Co.	-----	82.73	Accounts payable.
351	G. B. Cox	-----	44.28	Accounts payable.
352	J. E. Covington	-----	24.35	Accounts payable.
353	Armour & Co.	-----	465.14	Accounts payable.
286	Dr. L. B. McBrayer	250.00	-----	Salaries.
287	Dr. P. P. McCain	166.66	-----	Salaries.
288	Dr. S. W. Thompson	25.00	-----	Salaries.
289	Miss Ruth Withers	10.00	-----	Salaries.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
290	H. G. Stephens.....	\$ 50.00	\$ -----	Salaries.
291	J. A. Hearne.....	100.00	-----	Farm expense.
292	H. C. Beran.....	40.00	-----	Dairy.
293	James Shelley.....	30.00	-----	Dairy.
294	J. W. Reid.....	10.00	-----	Fuel, light, water.
295	Miss Elizabeth Connally.....	50.00	-----	Nurses and attendance.
296	Miss E. J. McIntosh.....	50.00	-----	Nurses and attendance.
297	Miss Clara Nanney.....	10.00	-----	Nurses and attendance.
298	Miss Bertha Shields.....	1.25	-----	Laundry.
		10.00	-----	Nurses and attendance.
299	Miss Annie Moore.....	10.00	-----	Nurses and attendants.
300	Miss Vennie Jones.....	10.00	-----	Nurses and attendants.
301	Lillie Leslie.....	12.00	-----	Service, cooks, etc.
302	North Carolina Sanatorium.....	316.00	-----	Service, cooks, etc.
354	North Carolina Sanatorium.....		60.45	Provisions.
			27.00	Stamps.
			1.25	Dairy.
			1.50	Farm expense.
			6.75	Refund to patients.
			1.20	Laundry.
			1.15	Hospital supplies.
355	Aberdeen Hardware Co.....		55.00	Accounts payable.
356	Gulf Refining Co.....		62.28	Accounts payable.
357	T. M. Sharpe.....		8.40	Accounts payable.
358	McKee Surgical Instrument Co.....		50.66	Accounts payable.
359	C. W. Antrim & Sons.....		8.58	Accounts payable.
360	A. & R. Railroad Co.....		3.38	Accounts payable.
361	M. C. Brady.....		53.80	Accounts payable.
362	W. L. Brodgen & Co.....		56.35	Accounts payable.
363	J. H. Culbreth & Co.....		171.77	Accounts payable.
364	Catawba Creamery Co.....		144.00	Accounts payable.
365	Friedman Manufacturing Co.....		18.00	Accounts payable.
366	The Gregg Co.....		5.75	Accounts payable.
367	Pine Crest Farm.....		.53	Accounts payable.
368	Scott & Co.....		50.40	Accounts payable.
369	Southern Express Co.....		87.68	Accounts payable.
370	The Surgical Selling Co.....		13.80	Accounts payable.
371	Armour & Co.....		406.71	Accounts payable.
372	M. C. Brady.....		73.14	Accounts payable.
304	Greensboro Hardware Co.....	75.71	-----	Accounts payable.
305	W. R. Bonsal & Co.....	12.30	-----	Accounts payable.
306	North Carolina Sanatorium.....	324.50	-----	Service, cooks, etc.
307	H. C. Beran.....	40.00	-----	Dairy.
308	James Shelley.....	30.00	-----	Dairy.
309	J. A. Hearne.....	100.00	-----	Farm.
310	Miss Elizabeth Connolly.....	50.00	-----	Nurses and attendants.
311	Miss E. J. McIntosh.....	50.00	-----	Nurses and attendants.
312	Miss Clara Nanney.....	10.00	-----	Nurses and attendants.
313	Miss Vennie Jones.....	10.00	-----	Nurses and attendants.
314	Miss Bertha Shields.....	10.00	-----	Nurses and attendants.
315	Miss Annie Moore.....	10.00	-----	Nurses and attendants.
316	J. W. Reid.....	5.59	-----	Fuel, light, water.
317	J. W. Reid.....	1.72	-----	Fuel, light, water.
373	Alderman's Wholesale Con.....		31.85	Accounts payable.
374	Adamson Manufacturing Co.....		1.00	Accounts payable.
375	Consolidated Safety Pin Co.....		3.15	Accounts payable.
376	D. F. Herring.....		61.98	Accounts payable.

## ITEMIZED EXPENDITURES—Continued.

Voucher and Warrant Number	To Whom—	State Appropriation	Aberdeen Bank	Charged To—
377	Johnson Garage & Machine Co.		\$ 42.95	Accounts payable.
378	The McNeill Bakery Co.		106.08	Accounts payable.
379	Maple Flake Mills		15.00	Accounts payable.
380	Pratt & Baker		77.13	Accounts payable.
381	Private Estate Coffee Co.		25.55	Accounts payable.
382	The Surgical Selling Co.		16.20	Accounts payable.
383	Sou. Stamp & Stationery Co.		4.84	Accounts payable.
384	Swift & Co.		64.63	Accounts payable.
385	Western Union Telegraph Co.		1.05	Accounts payable.
386	Walker Vulcanizing Co.		3.25	Accounts payable.
387	J. T. White & Co.		44.13	Accounts payable.
388	Peoples Laundry Co.		69.58	Accounts payable.
389	North Carolina Sanatorium		35.00	Donations to orphan children.
390	Fourth National Bank		6.00	Interest.
391	Fayetteville Ice Manufacturing Co.		98.04	Accounts payable.
392	Ottis Green Hardware Co.		22.53	Accounts payable.
393	J. S. Maultsby		57.38	Accounts payable.
394	Edgar Riley		1.00	Dairy.
395	Cliff Brown		3.50	Dairy.
396	Bud Brown		3.50	Dairy.
397	Will Brown		16.20	Dairy.
398	J. A. Hearne		7.00	Dairy.
399	North Carolina Sanatorium		4.00	Service, cooks, etc.
			39.78	Provisions.
			6.50	Dairy.
			25.00	Stamps.
			22.25	Farm expense.
			8.10	Telephone and teleg.
			19.55	Laundry.
			4.43	Hospital supplies.
			.40	Office supplies.
			25.40	Auto expense.

## Report of Treasurer, State Board of Health

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*Executive Department.*

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1912

**DISBURSEMENTS.**

Dec. 2.	Mrs. M. Rosenthal, Red Cross seals.....	\$ 5.00
3.	Bearer, drayage .....	.75
4.	King's Business College, typewriters.....	75.00
	Tabulating Mach. Co., electrotypes.....	5.37
	W. S. Rankin, Treasurer, Hookworm appro.....	500.00
	Southern Express Co., express.....	49.31
	Carolina Power & Light Co., lights.....	2.52
	W. G. Briggs, Postmaster, postage.....	47.39
	McGraw-Hill Book Co., Books.....	6.00
	Tri-State Medical Society, dues.....	3.00
	Addressograph Co., addressograph supplies.....	1.05
	Boylan-Pearce Co., domestic.....	1.83
5.	Postal-Cable Telegraph Co., telegram.....	.74
11.	Raleigh Adv. & Letterwriting Co., circular letters.....	9.85
	Macmillan Co., books .....	1.62
	Swindell Co., ink pads.....	.40
	Thos. H. Briggs & Sons, office supplies.....	1.30
	Southern Bell Telephone & Telegraph Co., telephone.....	.95
13.	Office Stationery Co., office supplies.....	4.20
	W. R. Macy, chart.....	9.00
14.	W. G. Briggs, Postmaster, postage.....	35.00
	W. S. Rankin, salary.....	250.00
	Warren H. Booker, salary.....	125.00
	Mabel Massey, salary .....	75.00
	Nellie B. Poole, salary.....	55.00
	Mary Robinson, salary.....	75.00
	Mamie C. Turner, salary.....	40.00
	S. B. Marley, salary.....	50.00
18.	Survey Association., Inc., books.....	2.00
	National Housing Association, books.....	2.00
	Tabulating Machine Co., office supplies.....	3.40
19.	Western Union Telegraph Co., telegrams.....	5.37
	C. A. Julian, salary.....	100.00
20.	John B. Andrews, Secretary, annual dues.....	3.00
	Sybil Hyatt, Chairman, annual dues.....	2.00
21.	E. R. Carroll, Manager, clerical service.....	30.00
	Jessie Knight, clerical service.....	6.00
	H. deB. Parsons, Secretary, annual dues.....	3.00
22.	Edward C. Register, subscription.....	1.50
	American Medical Association, books.....	1.00
	G. P. Putnam's Sons, books.....	.46
	Longmans, Green & Co., books.....	1.60

## FIFTEENTH BIENNIAL REPORT

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Dec.	26.	W. S. Rankin, Treasurer, Hookworm appropriation.....	\$ 500.00
	27.	W. G. Briggs, Postmaster, postage.....	15.00
	28.	Edward Hughes, drayage .....	1.07
	31.	Alfred Williams & Co., books and office supplies.....	5.75
1913.			
Jan.	3.	W. G. Briggs, Postmaster, postage.....	50.00
	4.	Raleigh Adv. & Letterwriting Co., multigraphing.....	26.60
		Jessie Knight, salary.....	9.00
	6.	Ernest Trice, cleaning offices.....	2.00
	9.	J. C. Nixon, cleaning rugs.....	2.00
		Henry Pitts, drayage.....	.25
		Carolina Power & Light Co., lights.....	3.78
	11.	Raleigh Adv. & Letterwriting Co., addressograph plates.	48.00
		Bessie King, salary.....	6.00
	13.	Southern Express Co., express.....	9.60
		Materna Co., Materna measures.....	3.50
	15.	W. S. Rankin, traveling expenses.....	33.41
		S. B. Marley, salary.....	25.00
	17.	Lewis, Battle & Tucker, rent.....	105.00
		W. G. Briggs, Postmaster, postage.....	78.17
		Lea & Febiger, book.....	5.00
		Powell & Powell, fuel.....	11.30
		Carolina Power & Light Co., lights.....	4.05
		Capital City Telephone & Telegraph Co., telephone.....	1.00
		American Medical Association, dues.....	5.00
		Tabulating Machine Co., office supplies.....	14.40
		John Wiley & Sons, books.....	3.00
		Mutual Publishing Co., mailing bulletins.....	13.50
		G. J. Badger, addressograph supplies.....	17.50
		Gertrude B. Knipp, Treasurer, annual dues.....	5.00
		Office Stationery Co., office supplies.....	3.75
		Motor Truck Transfer Co., drayage.....	1.00
	18.	Western Union Telegraph Co., telegrams.....	2.28
		S. Spencer Moore & Co., office furniture.....	15.00
		Raleigh Advertising & Letterwriting Co., steno. service..	26.25
		Margaret R. Habel, clerical service.....	7.50
		Southern Bell Telephone & Tel. Co., telephone, 1 yr.....	64.18
	24.	D. T. Tayloe, traveling expenses.....	70.00
		J. L. Ludlow, salary 1912.....	1,000.00
	25.	Mildred Swain, clerical service.....	19.50
		Jessie Knight, clerical service.....	1.20
	27.	W. G. Briggs, Postmaster, postage.....	5.00
	28.	Bettie Hicks, clerical service.....	1.00
	29.	H. M. Bracken, Treasurer, annual dues.....	10.00
		Sturgis & Walton Co., books.....	2.15
		D. Appleton & Co., books.....	17.50
		Ernest Trice, labor.....	2.00
	30.	W. G. Briggs, Postmaster, postage.....	10.00
	31.	W. S. Rankin, salary.....	250.00
		Warren H. Booker, salary.....	125.00
		Mabel Massey, salary.....	75.00

## NORTH CAROLINA BOARD OF HEALTH

Jan.	31.	Nellie B. Poole, salary.....	\$ 55.00
		Mary Robinson, salary.....	75.00
		S. B. Marley, salary.....	25.00
		Margaret Rogers, clerical service.....	11.00
		Margaret Habel, clerical service.....	5.50
		Ella S. Mial, clerical service.....	16.00
		T. E. Anderson, traveling expenses.....	20.95
		J. E. Mitchell, repairs.....	1.00
		S. Spencer Moore & Co., office furniture.....	56.79
		Mamie C. Turner, salary.....	40.00
Feb.	1.	J. Howell Way, traveling expenses.....	32.10
		Bearer, drayage .....	1.25
	3.	W. G. Briggs, Postmaster, postage.....	50.00
		W. G. Briggs, Postmaster, postage.....	21.44
	4.	Chas. Stephenson, salary .....	28.00
		News & Observer Publishing Co., books.....	2.00
	7.	N. C. S. Bd. H. Hookworm Fund.....	500.00
		Southern Express Co., express.....	35.15
		Office Stationery Co., office supplies.....	8.20
		W. G. Briggs, Postmaster, postage.....	42.64
		J. C. Brantley, benzine.....	.25
		Carolina Power & Light Co., lights.....	4.80
		Ruby Lumsden, clerical service.....	3.50
		Western Union Telegraph Co., telegrams.....	8.82
	8.	Bearer, drayage .....	1.45
		Margaret Habel, clerical service.....	5.00
	10.	J. R. Leguence, blue prints.....	1.25
		Benj. Taylor, drayage.....	1.15
	11.	E. R. Carroll, manager, multigraphing.....	7.60
		W. S. Rankin, traveling expenses.....	31.75
	15.	S. B. Marley, salary.....	25.00
	18.	American Academy of Med. Press, books.....	1.00
		System, subscription .....	2.00
		Powell & Powell, fuel.....	15.00
		Thos. H. Briggs & Sons, supplies.....	4.56
	21.	W. G. Briggs, Postmaster, postage.....	26.00
	24.	V. Rand, clerical service.....	4.00
		Ella S. Mial, clerical service.....	18.50
	28.	Bessie King, clerical service.....	2.34
		W. S. Rankin, salary.....	250.00
		Warren H. Booker, salary.....	125.00
		Mabel Massey, salary.....	75.00
		Nellie B. Poole, salary.....	55.00
		Mary Robinson, salary.....	75.00
		Mamie C. Turner, salary.....	40.00
		S. B. Marley, salary.....	25.00
		Lorena Holloway, labor.....	1.10
		Raleigh Adv. & Letterwriting Co., addressograph plates.	13.52
		Helen Batchelor, clerical service.....	8.22
Mar.	5.	Margaret Rogers, clerical service.....	16.00

Mar.	6.	N. C. S. Bd. H. Hookworm Fund, appropriation.....\$	500.00
		Baptist Book Store, magazines.....	2.35
	7.	Southern Express Co., express.....	18.38
		Carolina Power & Light Co., lights.....	2.52
		W. G. Briggs, Postmaster, postage.....	39.36
		M. Rosenthal & Co., paper towels.....	7.50
		Southern Bell Telephone & Telegraph Co., telegrams....	1.25
		Office Stationery Co., office supplies.....	4.85
		Lumsden Bros., repairs.....	.75
		Science Press, subscription.....	5.00
		Beauvais Typewriter Co., office supplies.....	18.00
		G. J. Badger, office supplies.....	4.38
		Thos. H. Briggs & Sons, supplies.....	.50
		Frank C. Wallace, books.....	.18
	8.	Ella S. Mial, clerical service.....	3.00
	10.	W. G. Briggs, Postmaster, postage.....	50.00
	12.	Remington Typewriter Co., office supplies.....	7.00
		J. Howell Way, traveling expenses.....	31.85
	13.	S. A. L. Railway Co., freight.....	2.28
	15.	J. L. Ludlow, traveling expenses.....	32.00
		S. B. Marley, salary.....	25.00
	17.	Western Union Telegraph Co., telegrams.....	15.16
		W. R. Macy, chart.....	2.00
		Weathers Furniture Co., office furniture.....	33.55
		J. Bryan Grimes, books.....	3.60
		W. G. Briggs, Postmaster, postage.....	1.00
		Bearer, drayage .....	1.25
	19.	W. G. Briggs, Postmaster, postage.....	42.00
	21.	Henry Pitts, drayage .....	.75
		G. H. Dorch & Bro., insurance.....	10.50
		G. H. Dorch & Bro., insurance.....	21.00
	24.	W. G. Briggs, Postmaster, postage.....	35.00
	25.	American Multigraph Sales Co., multigraph.....	357.70
	26.	Tabulating Machine Co., office supplies.....	19.80
		A. W. Shaw Co., books.....	6.00
		Swindell Co., rubber stamps.....	.50
	31.	W. S. Rankin, salary.....	250.00
		Warren H. Booker, salary.....	125.00
		Mabel Massey, salary.....	75.00
		Nellie B. Poole, salary.....	55.00
		Mary Robinson, salary.....	75.00
		Mamie C. Turner, salary.....	40.00
		S. B. Marley, salary.....	25.00
		Lorena Holloway, labor .....	2.30
		Public Service Cup Co., drinking cups.....	8.00
	14.	Interest on \$2,000 debited by bank.....	30.00
Apr.	1.	W. S. Rankin, traveling expenses.....	22.63
		Hookworm Fund, appropriation.....	500.00
		W. G. Briggs, Postmaster, postage.....	78.00
	2.	Helen Batchelor, clerical service.....	11.95
		Lewis, Battle & Tucker, rent.....	105.00

Apr.	7.	Mabel Massey, salary .....	\$ 30.00
	8.	E. R. Carroll, Manager, circular letters.....	15.35
		Southern Express Co., express.....	21.18
		Lumsden Bros., repairs.....	1.25
		Carolina Power & Light Co., lights.....	3.69
		Office Stationery Co., office supplies.....	9.15
		Survey Association, Inc., books.....	.25
		American Waterworks Association, dues.....	5.00
		W. G. Briggs, Postmaster, postage.....	36.28
		Alfred Williams & Co., office supplies.....	15.35
		Swindell & Co., repairs.....	3.50
		Powell & Powell, fuel.....	15.00
		American Medical Publishing Co., books.....	1.00
		Southern Bell Telephone & Telegraph Co., long distance.	1.90
		American Multigraph Sales Co., multigraph supplies....	4.50
		Western Union Telegraph Co., telegrams.....	4.57
		S. B. Marley, clerical service.....	2.05
		Ella Lee, clerical service.....	1.40
		Bess Coffin, clerical service.....	1.40
		Flossie Jones, clerical service.....	1.50
		Minnie Branch, clerical service.....	1.40
	9.	Richard Brown, drayage.....	.50
	11.	A. O. Goodwin, cartoon.....	10.00
	12.	Associated Press, books.....	.50
	14.	W. G. Briggs, Postmaster, postage.....	21.44
		Isaac Perkins, drayage.....	1.00
	15.	Mamie C. Turner, salary.....	20.00
		S. B. Marley, salary.....	25.00
		Journal American Medical Association, adv.....	6.25
		Southern Sociological Congress, annual dues.....	3.00
		Carl Kelsey, Acting President, annual dues.....	5.00
		A. O. Goodwin, two cartoons.....	15.00
	17.	Minnie Batchelor, clerical service.....	4.20
	19.	S. B. Marley, clerical service.....	6.70
	21.	Addressograph Co., office supplies.....	17.32
		W. S. Rankin, salary.....	250.00
	23.	A. O. Goodwin, cartoon.....	10.00
	25.	S. Reyner, charts.....	6.00
		Lorena Holloway, labor.....	2.35
		Raleigh Advertising & Letterwriting Co., office supplies.	2.00
	26.	J. E. Mitchell, office fixtures.....	.60
		J. E. Crayton & Co., dictaphone.....	56.35
		W. G. Briggs, Postmaster, postage.....	30.00
		H. T. Bahnsen, drayage.....	.40
	28.	G. M. Cooper, telephone.....	.60
	30.	Warren H. Booker, salary.....	125.00
		Mabel Massey, salary.....	45.00
		Nellie B. Poole, salary.....	55.00
		Mary Robinson, salary.....	75.00
		Inez E. Hufham, salary.....	12.00
		Helen Batchelor, salary.....	10.90

May	1.	W. S. Rankin, traveling expenses.....	\$ 63.28
		W. S. Rankin, Treas. appro.....	500.00
		E. B. Davis, salary.....	45.00
	3.	G. J. Massey, labor.....	1.75
	5.	W. G. Briggs, P. M., postage.....	78.00
	6.	S. Spencer Moore & Co., office supplies.....	4.40
		Amer. Multigraph Sales Co., office supplies.....	3.19
	8.	Southern Express Co., express .....	11.58
		Journal of Inf. Diseases, books.....	.65
		J. B. Lippincott, books.....	2.75
		H. M. Gillie, traveling expenses.....	2.00
		Carolina Power & Light Co., lights.....	2.76
		Office Stationery Co., office supplies.....	2.05
		Swindell Co., office supplies.....	.65
		Western-Union Telegraph Co., telegrams.....	5.30
		J. R. Ferrall & Co., supplies.....	1.60
		J. C. Brantley, supplies.....	.65
	12.	Southern Bell Telephone & Telegraph Co., telephone....	1.00
	13.	Alfred R. Kimball, Treasurer, dues.....	3.00
	14.	W. S. Rankin, traveling expenses.....	39.14
		Amer. Mult. Sales Co., office supplies.....	24.00
	15.	Luke Hall, labor.....	1.00
	15.	William Poole, labor.....	1.00
		Boston Medical and Surgical Journal, books.....	.25
		G. J. Massey, labor.....	3.50
		W. G. Briggs, P. M., postage.....	23.82
		R. O. Self, salary.....	33.34
		McKimmon Dry Goods Co., apron.....	.69
	16.	Raleigh Adv. & Letterwriting Co., clerical service.....	5.67
		L. A. Emory, repairs.....	6.16
		Thos. Mitchell, labor.....	1.50
		Alfred Williams, office supplies.....	5.05
	26.	Warren H. Booker, postage.....	50.00
		J. C. Perry, labor.....	6.05
		T. C. Steele, labor.....	6.05
	27.	Grace Mangum, clerical service.....	2.25
		Margaret Batchelor, clerical service.....	3.05
		Kathleen Johnson, clerical service.....	2.25
		Ethel Johnson, clerical service.....	1.00
		Thomas Mitchell, labor.....	1.35
		Logan Headen, labor.....	1.25
	28.	Water Lee Horton, labor.....	1.20
		W. S. Rankin, salary.....	250.00
		William Williams, drayage.....	.60
	31.	Warren H. Booker, salary.....	125.00
		Mabel Massey, salary.....	75.00
		Nellie B. Poole, salary.....	55.00
		Mary Robinson, salary.....	75.00
		Inez Hufham, salary.....	30.00
		G. J. Massey, labor.....	3.50

May 31.	Helen Batchelor, clerical service.....	\$ 11.85
	John Winder Horton, labor.....	3.00
June 2.	W. G. Briggs, Postmaster, postage.....	78.00
	R. O. Self, salary.....	33.33
	Raleigh Adv. & Letterwriting Co., adv. and machine rent	12.00
3.	F. E. Wood, office supplies.....	1.50
	Ruth A. Robinson, clerical service.....	17.50
4.	Weathers Furniture Co., office furniture.....	6.25
5.	Broad Rock Min. Spring Co., water cooler.....	5.00
6.	W. S. Rankin, traveling expenses.....	55.55
	Carolina Power & Light Co., lights.....	3.12
	Swindell Co., office supplies.....	.75
	Office Stationery Co., office supplies.....	9.20
	W. G. Briggs, P. M., postage.....	2.00
	Southern Express Co., express.....	18.60
	Baker-Thompson Lum. Co., lumber.....	23.35
	W. G. Briggs, Postmaster, postage.....	33.50
	D. Appleton Co., Books.....	11.00
	Southern Bell Telephone & Telegraph Co., telephone....	.25
7.	Bruce Markham, salary.....	2.50
10.	Western Union Telegraph Co., telegrams.....	4.63
	Committee of One Hundred, dues.....	5.00
13.	Frank S. Smith, photograph.....	2.00
14.	Mary Robinson, salary.....	37.50
	Mabel Massey, salary.....	37.50
	W. S. Rankin, traveling expenses.....	37.93
18.	N. C. State Board of Health, appropriation.....	1,000.00
19.	J. C. Nixon, cleaning rugs.....	2.50
	Lorena Holloway, labor.....	.75
20.	J. S. Wiggs, carpenter work.....	13.30
21.	Bearer, Logan Nuckles, drayage.....	.25
	W. R. Macy, charts.....	12.00
	Joseph Wiggs, labor.....	3.00
25.	Warren H. Booker, cash advanced for labor.....	3.35
27.	Thomas H. Briggs & Sons, nails.....	.62
	D. Appleton & Co., books.....	6.00
28.	Reid Gattis, salary.....	3.00
	O. B. Mitchell, prize for name.....	5.00
30.	W. S. Rankin, salary.....	250.00
	Warren H. Booker, salary.....	275.00
	Mabel Massey, salary.....	37.50
	Nellie B. Poole, salary.....	55.00
	Mary Robinson, salary.....	37.50
	Inez Hufham, salary.....	30.00
	Ella S. Mial, clerical service.....	4.50
	J. Howell Way, traveling expenses.....	56.60
	W. S. Rankin, traveling expenses.....	26.92
	Ruth A. Robinson, clerical service.....	13.75
	Wm. Bryant, labor.....	.68
	Chas. Dunston, labor.....	.68
	Warren H. Booker, traveling expenses.....	37.00

July	1.	Mamie C. Turner, salary.....	\$ 13.45
		Raleigh Advertising & Letterwriting Co., machine rent..	2.00
		Frank Dunn, drayage.....	1.00
		Jno. A. Ferrell, traveling expenses.....	24.82
		Willie Robinson, labor.....	1.45
		Mitchell Shaw, labor.....	1.50
		Norman Jones, labor.....	1.50
		Tom Mitchiner, labor .....	1.50
	2.	W. G. Briggs, Postmaster, postage.....	62.00
	3.	Busbee & Busbee, agents, premium on bond.....	115.00
		W. S. Rankin, salary.....	250.00
		Edward C. Register, traveling expenses.....	25.20
		J. C. Brantley, supplies.....	2.85
		Carolina Power & Light Co., lights.....	1.75
		W. G. Briggs, Postmaster, postage.....	2.49
		Western Union Telegraph Co., telegrams.....	8.62
		J. P. Hayes, photographs.....	6.65
		T. E. Anderson, traveling expenses.....	46.65
		The Art Shop, office fixtures.....	4.85
		Alfred Williams & Co., office supplies.....	4.15
		Ella S. Mial, clerical service.....	4.50
		Farmer-Cole Plumbing Co., repairs.....	.60
		American Journal Public Health, advertising.....	9.00
		Southern Express Co., express.....	15.97
	5.	A. L. Foster, water.....	.50
		J. S. Wiggs, carpenter work.....	17.25
	7.	Wm. Bryant, labor.....	.60
		Tim Rogers, labor .....	.60
		T. F. Brockwell, keys.....	1.60
		Vadie Fellows, labor.....	1.60
	9.	W. O. Spencer, traveling expenses.....	50.40
		Office Stationery Co., office supplies.....	3.40
		Winston Davis, charts.....	3.25
		E. M. Uzzell & Co., office supplies.....	18.30
		Southern Bell Telephone & Telegraph Co., telephone.....	2.10
		John A. Ferrell, tel.....	1.20
		Reid Gattis, labor.....	1.50
		Thos. H. Briggs & Sons, supplies.....	.75
		Mary Robinson, cash adv. for drayage.....	.60
	11.	Norman Jones, labor.....	2.37
	12.	Hunter Ellington, Salary .....	3.50
	14.	American Journal of Public Health, books.....	1.00
	15.	Merchants National Bank, office furniture.....	169.05
		W. G. Briggs, Postmaster, postage.....	5.00
		Lewis, Battle & Tucker, rent.....	105.00
	17.	Marie Parker, clerical service.....	1.80
		Elizabeth Uzzell, clerical service.....	1.50
		Kathleen Johnson, clerical service.....	1.50
	19.	Grace Crews, clerical service.....	5.50
		Hunter Ellington, salary.....	3.00
	22.	Postal Telegraph-Cable Co., telegram.....	.50

July	23.	Warren H. Booker, salary.....	\$ 175.00
	25.	W. G. Briggs, Postmaster, postage.....	30.00
	A. L. Foster, water.....	1.00	
	26.	Ella S. Mial, clerical service.....	7.50
	Dobbin-Ferrall Co., supplies.....	26.62	
	Public Service Cup Co., drinking cups.....	4.00	
	W. R. Macy, chart.....	2.25	
	Hunter Ellington, salary.....	3.00	
	Hunter Ellington, salary.....	1.00	
	Grace Crews, clerical service.....	4.50	
	28. Bearer, drayage .....	.25	
	29. American Medical Association. Books.....	3.10	
	G. J. Massey, labor.....	.25	
	30. Warren H. Booker, traveling expenses.....	21.15	
	Alfred R. Kimball, Treasurer, dues.....	2.00	
	W. S. Rankin, traveling expenses.....	187.24	
	31. Mary Robinson, salary.....	75.00	
	Nellie B. Poole, salary .....	55.00	
	Inez E. Hufham, salary.....	35.00	
	Mabel Massey, salary .....	25.00	
	Lorena Holloway, labor.....	1.80	
	Roscoe Miller, drayage .....	.35	
Aug.	1.	Baker-Thompson Lumber Co., lumber.....	23.97
	2.	M. Rosenthal & Co., supplies.....	4.40
	W. G. Briggs, Postmaster, postage.....	91.00	
	Hunter Ellington, salary .....	4.00	
	Grace Crews, clerical service.....	6.00	
	John F. Sweeney & Sons, lantern slides.....	5.75	
	4. Swindell & Co., rubber stamps.....	1.00	
	Wm. Armstead, drayage .....	.35	
	5. N. C. State Board of Health, Hookworm Fund, appro....	500.00	
	Cash (sundries for office).....	5.00	
	6. Mabel Massey, salary.....	25.00	
	7. Hunter Ellington, salary .....	1.35	
	8. Southern Express Co., express.....	73.31	
	Western Union Telegraph Co., telegrams.....	.91	
	Thos. A. Partin Co., supplies.....	3.88	
	Addressograph Co., office supplies.....	.58	
	J. E. Ashcraft, traveling expenses.....	37.40	
	Office Stationery Co., office supplies.....	5.85	
	Royall & Borden Co., office furniture.....	10.00	
	W. G. Briggs, Postmaster, Postage.....	50.07	
	Henry T. Hicks Co., water.....	6.50	
	Carolina Power & Light Co., lights.....	2.64	
	American Multigraph Sales Co., office supplies.....	2.47	
	Southern Bell Telephone & Telegraph Co., telephone.....	2.20	
	C. E. Johnson, rent.....	40.00	
	9. American Medical Association, cartoons.....	1.75	
	Alfred Williams & Co., office supplies.....	10.75	
	A. L. Foster, water.....	1.25	
	11. Phil. H. Andrews, books.....	3.50	

Aug.	12.	Raleigh Adv. & Letterwriting Co., circular letters.....\$	7.05
		Hill Directory Co., books.....	4.00
		S. Spencer Moore & Co., office furniture.....	26.42
	13.	Addressograph Co., office supplies.....	3.50
		L. E. Nichols, reading proof.....	5.00
	14.	W. S. Rankin, traveling expenses.....	21.45
		Nellie B. Poole, salary.....	55.00
		Inez E. Hufham, salary.....	20.00
		A. L. Pendleton, drayage.....	.85
	15.	Green-Watson Art Shop, office supplies.....	4.60
	16.	H. H. Harris, salary.....	5.34
		Mamie C. Turner, clerical service.....	7.05
	18.	American City, books .....	2.00
		John Wiley & Co., books.....	2.54
		P. M. Foltz, lantern slides.....	19.55
	19.	Grace Crews, clerical service.....	12.00
	20.	Imperial Manufacturing Co., office supplies.....	4.00
	22.	W. G. Briggs, Postmaster, postage.....	21.00
	23.	Warren H. Booker, salary.....	175.00
		Arthur H. Thomas Co., office supplies.....	.97
		Henry Houze Harris, salary.....	4.00
		Warren H. Booker, traveling expenses.....	28.45
		K. Holloway, drafting.....	4.50
	25.	J. E. Mitchell, lantern slide boxes.....	3.25
	29.	W. S. Rankin, salary.....	250.00
		W. S. Rankin, traveling expenses.....	28.27
	30.	Nellie B. Poole, extra work.....	5.00
		Mary Robinson, salary .....	75.00
		Grace Crews, clerical service.....	12.00
		Lydia Sorrell, salary.....	19.80
		Presto-O-lite Co., acetylene gas.....	1.60
		Henry Houze Harris, salary.....	4.00
Sept.	2.	W. G. Briggs, Postmaster, postage.....	5.00
		N. C. State Board of Health, Hookworm Fund, appro....	1,000.00
		J. E. Mitchell, lantern slide boxes.....	3.50
	5.	Carroll Adv. & Letterwriting Co., clerical service.....	14.65
		P. W. Covington, traveling expenses.....	64.78
		P. W. Covington, salary.....	127.68
	6.	Henry Houze Harris, salary.....	4.00
	9.	Southern Express Co., express.....	66.51
		Public Service Cup Co., drinking cups.....	8.00
		Addressograph Co., office supplies.....	.93
		Royall & Borden Furniture Co., office furniture.....	20.00
		Office Stationery Co., office supplies.....	7.65
		Southern Bell Telephone & Telegraph Co., telephone.....	8.45
		W. G. Briggs, Postmaster, postage.....	21.95
		Carolina Power & Light Co., lights.....	2.64
		Carolina Power & Light Co., electric fan.....	12.50
		Western Union Telegraph Co., telegrams.....	8.88
	10.	Dobbin-Ferrall Co., office supplies.....	1.00
		C. E. Johnson, President, rent.....	40.00

Sept.	10.	Alfred Williams & Co., office supplies.....	\$ 5.20
		Chas. O'H. Laughinghouse, traveling expenses.....	33.00
	11.	Norman Jones, labor .....	5.70
	12.	Norman Jones, labor .....	2.80
	13.	Henry Houze Harris, salary.....	4.00
	15.	J. B. Lippincott Co., books.....	1.50
	17.	Mabel Massey, salary.....	25.00
	18.	W. G. Briggs, Postmaster, postage.....	91.00
		W. S. Rankin, traveling expenses.....	153.06
	19.	National Association S. & P. Tuberculosis, dues.....	5.00
		Reflector Co., handbills .....	1.25
		Thos. H. Briggs & Sons, supplies.....	5.55
		Scientific Temperance Journal, subscription.....	.60
	20.	Carolina Electrical Co., exhibit material.....	22.50
		George Cranford, salary.....	5.00
	22.	Engineering & Contracting Co., books.....	2.00
		Remington Typewriter Co., typewriter.....	46.00
	23.	W. G. Briggs, Postmaster, postage.....	22.00
	25.	W. G. Briggs, Postmaster, postage.....	4.00
		Selchow & Righter Co., exhibit material.....	13.00
	27.	W. S. Rankin, salary.....	250.00
		A. L. Foster, water.....	2.25
		Joseph H. Cohen, baby contest supplies.....	2.75
		J. Howell Way, traveling expenses.....	33.10
		Carver's Stables, livery.....	2.50
		P. W. Covington, salary.....	208.34
		Warren H. Booker, salary.....	175.00
		Nellie B. Poole, salary.....	65.00
		Mary Robinson, salary.....	75.00
		Lydia Sorrell, salary .....	30.00
		Inez Hufham, salary .....	35.00
		Warren H. Booker, cash advanced for drayage.....	.65
		George Cranford, salary .....	5.00
		S. Spencer Moore & Co., office supplies.....	2.95
		W. G. Briggs, Postmaster, postage.....	85.56
		Warren H. Booker, traveling expenses.....	63.65
Oct.	4.	E. R. Carroll, clerical service.....	29.50
		W. S. Rankin, traveling expenses.....	53.37
		Aronson & Browne, lantern slides.....	10.00
		Henry Debnam, labor .....	1.50
		W. Dewar, labor .....	2.89
	6.	J. L. Ludlow, traveling expenses.....	126.30
		Chas. O'H. Laughinghouse, traveling expenses.....	13.30
		T. E. Anderson, traveling expenses.....	18.50
	7.	W. G. Briggs, Postmaster, postage.....	10.00
	8.	Alfred Williams & Co., office supplies.....	2.77
	9.	Southern Express Co., express.....	33.93
		W. G. Briggs, Postmaster, postage.....	20.01
		Ellington Lumber Co., lumber.....	18.75
		Alderman Toy & China Co., exhibit material.....	2.75
		Weathers Furniture Co., office furniture.....	6.60

Oct.	9.	M. Rosenthal & Co., paper towels.....	\$ 15.00
		T. F. Brockwell, repairs.....	1.25
		Office Stationery Co., office supplies.....	4.20
		Chicago Tribune, subscription.....	6.50
		Dobbin-Ferrall Co., supplies.....	3.10
		Farmer-Cole Plumbing Co., repairs.....	.60
		Christopher Engraving Co., cuts.....	15.00
		Western Union Telegraph Co., telegrams.....	8.39
		P. W. Covington, traveling expenses.....	45.23
		Carolina Power & Light Co., lights.....	2.30
13.		Carroll Adv. & Letterwriting Co., graphotype.....	200.00
		Charlotte Medical Journal, books.....	1.50
		Scott Paper Co., paper towels.....	4.50
14.		Rufus Hinton, drayage.....	.75
15.		W. G. Briggs, Postmaster, postage.....	50.00
		Mary Robinson, salary.....	37.50
16.		C. L. Pridgen, traveling expenses.....	12.50
17.		J. W. Carden, lettering signs.....	2.40
		S. L. Rotter, writing press articles.....	30.00
18.		W. G. Briggs, Postmaster, postage.....	42.00
		Geo. Humphries, drayage.....	1.50
		Henry Debnam, labor .....	3.00
		Katharine Crews, clerical service.....	1.00
		Helen Batchelor, clerical service.....	3.20
20.		Emily Boyd, supplies.....	2.00
		Hobby Bros., matting.....	3.00
21.		George Smith, labor.....	.75
		G. J. Massey, labor.....	.50
		Abe Millis, drayage.....	.50
		S. B. Marley, .....	1.80
		Thos. H. Briggs & Sons, supplies.....	2.20
		Col. J. L. Ludlow, traveling expenses.....	50.75
		The Survey, subscription.....	3.00
		Underwood Typewriter Co., typewriter.....	83.03
		American Museum Natural History, prints.....	.75
		Western Newspaper Union, health page plates.....	75.00
22.		P. L. Card, carpenter work.....	36.26
		William Dewar, labor.....	2.32
		Rufus Hinton, drayage.....	.75
		Geo. Humphries, drayage.....	2.00
25.		Gabe Taylor, drayage.....	.75
		William Davis, drayage.....	.50
		Cash, drayage .....	5.00
		Haywood Poole, salary.....	5.50
		J. W. Carden, lettering signs.....	5.60
		W. G. Briggs, Postmaster, postage.....	30.00
		P. B. Crempler, labor.....	2.40
		H. Burleson, labor .....	1.60
		F. H. Kohloss, labor.....	2.10
		B. W. Setzer, labor.....	1.20
		J. Fountain, labor.....	.60

Oct.	28.	Norfolk & Southern, freight.....	\$ 1.66
		Southern Sanitary Congress, dues.....	2.00
		D. L. Leak, drayage.....	.50
		Public Service Cup Co., cups and cup holders.....	77.00
		Educational Exhibit Co., exhibit material.....	44.65
31.		W. S. Rankin, salary.....	250.00
		Warren H. Booker, salary.....	175.00
		Mary Robinson, salary.....	37.50
		Lydia Sorrell, salary.....	30.00
		Inez Hufham, salary .....	35.00
		P. W. Covington, salary.....	208.34
		Nellie B. Poole, salary.....	65.00
		Mabel Massey, salary.....	25.00
		S. B. Pearman, Treas., contribution to anniversary fund	5.00
		J. C. Brantley, supplies.....	.65
		Haywood Poole, salary.....	4.00
		Frances Wilson, salary.....	40.00
		P. W. Covington, traveling expenses.....	42.94
Nov.	1.	Baker-Thompson Lumber Co., Lumber.....	.28
		N. G. Griffith, drayage.....	.75
		F. H. Kohloss, labor.....	1.00
		Cash, sundries .....	5.00
		H. Burleson, labor.....	.80
		Thomas Marrow, labor.....	7.13
		J. W. Carden, lettering cards.....	4.40
		W. R. Macy, lettering cards.....	32.00
		Wm. M. Jones, traveling expenses.....	7.10
		Haywood Poole, labor.....	2.00
	3.	Pittsburgh Plate Glass Co., glass top for desk.....	11.60
		Winston Davis, exhibit material.....	9.00
		Carolina Electrical Co., exhibit material.....	1.20
		Inex Hufham, extra work.....	5.00
	6.	Plummer Stables, drayage.....	7.00
	7.	Office Stationery Co., office supplies.....	2.80
		W. G. Briggs, Postmaster, postage.....	3.00
		Carolina Power & Light Co., lights.....	3.12
		Royall & Borden Furniture Co., office furniture.....	19.00
		Rex Hospital, surgeons' gowns.....	6.25
		American Multigraph Sales Co., office supplies.....	.75
		Edwards & Broughton Printing Co., cuts.....	13.20
		Engineering News, subscription.....	5.00
		Hunter-Rand Co., cheese cloth.....	4.12
		Educational Exhibit Co., exhibit material.....	28.84
		A. C. Fluck, labor.....	2.70
		J. R. Ferrall & Co., broom.....	.40
		M. V. Richards, refund.....	22.50
		Mamie C. Turner, clerical service.....	10.50
	8.	Southern Express Co., express.....	52.67
		Western Union Telegraph Co., telegrams.....	14.83
		S. Spencer Moore Co., office furniture.....	45.62
		Mrs. L. W. Blanton, exhibit material.....	15.00

Nov. 8.	J. W. Watts, Jr., clerical work.....	\$ 3.00
	Carolina Power & Light Co., lights.....	15.35
	Thomas A. Partin, oil cloth.....	1.66
	Ruth A. Robinson, clerical service.....	1.50
	Southern Bell Telephone & Telegraph Co., telephone.....	6.25
	Thos. H. Briggs & Sons, exhibit material and supplies...	22.20
	Farmer-Cole Plumbing Co., repairs.....	.60
	Swindell-Barnes Co., office supplies.....	.50
	Raleigh Roofing & Cornice Co., supplies.....	2.50
	C. E. Johnson, President, rent.....	80.00
	Ellington Lumber Co., lumber.....	5.22
	W. G. Briggs, Postmaster, postage.....	30.00
11.	Wake Millinery Co., paper bags.....	2.50
	W. S. Rankin, traveling expenses.....	2.20
	J. W. Covington, drayage.....	1.75
	Carroll Adv. & Letterwriting Co., circular letters.....	6.85
	Mary Robinson, salary and expenses.....	27.80
12.	State Registrar, appropriation.....	2,166.66
	N. C. State Board of Health, Hookworm Fund, appro....	1,500.00
13.	J. P. Hayes, photographs.....	12.55
14.	W. G. Briggs, Postmaster, postage.....	108.00
	Toyland, toys for baby contest.....	.65
	Thompson Electrical Co., wire.....	7.60
	Raleigh French Dry Cleaning Co., cleaning rug.....	3.50
15.	W. H. Brewer, office supplies.....	.30
	Boylan-Pearce Co., exhibit material and baby contest sup.	27.91
	Weathers Furniture Co., office furniture.....	2.75
	H. E. Satterfield, exhibit material.....	7.25
	R. T. Poole, exhibit material.....	45.36
	W. G. Briggs, Postmaster, postage.....	21.51
	Electrical Eng. & Con. Co., exhibit material.....	5.65
	Oak City Steam Laundry, laundry.....	1.06
	Haywood Poole, salary.....	12.50
17.	P. Foster, labor.....	6.40
	Jane E. Ward, salary.....	8.00
18.	W. S. Rankin, State Registrar appropriation.....	5,833.34
20.	Margie Murchison, clerical service.....	3.00
21.	Lola Clapp, clerical service.....	1.00
22.	Lena Hicks, clerical service.....	1.40
	Lucas Bros., routing tacks.....	8.52
23.	Ella Mial, clerical service.....	5.25
	O. L. Card, carpenter work.....	28.85
24.	A. L. Foster, water.....	2.00
	Samuel Harris Fountain Pen Co., fountain pens.....	6.00
	George Hinton, drayage .....	1.25
25.	Alfred Williams & Co., office supplies.....	5.30
	J. W. Coppedge, labor.....	.75
	Haywood Poole, salary .....	5.00
29.	W. G. Briggs, Postmaster, postage.....	28.00
	W. S. Rankin, salary.....	250.00
	Warren H. Booker, salary.....	175.00

Nov.	29.	Nellie B. Poole, salary.....	\$	65.00
		Mary Robinson, salary .....		50.00
		P. W. Covington, salary.....		208.33
		Frances Wilson, salary.....		60.00
		Inez Hufham, salary.....		40.00
		Lydia Sorrell, salary.....		30.00
		Haywood Poole, salary.....		7.50
		Mabel Massey, salary.....		25.00
		C. E. Johnson, rent.....		40.00
		P. W. Covington, traveling expenses.....		19.23
		M. Rosenthal & Co., supplies.....		.40
		Athalie May, clerical service.....		13.14
		Helen Batchelor, clerical service.....		8.75
Dec.	4.	W. G. Briggs, Postmaster, postage.....		100.00
	6.	Citizens National Bank, overdraft 1912.....		942.52
	10.	Swindell-Barnes Co., rubber stamp.....		.15
		W. S. Rankin, Treasurer, annual dues.....		10.00
		Sybil Hyatt, books.....		1.00
		Macmillan Co., books.....		1.98
		Postal Telegraph & Cable Co., telegrams.....		1.47
		Southern Express Co., express.....		.25
	22.	Western Union Telegraph Co., telegrams.....		2.04
	16.	Nellie B. Poole, salary.....		65.00
		W. S. Rankin, salary.....		250.00
		Powell & Powell, fuel and ice.....		31.95
		E. M. Uzzell & Co., pencil pads.....		1.80
		American Asso. for Prevention of Infant Mortality, dues		5.00
	8.	American Public Health Association, dues.....		5.00
	19.	Inez Hufham, clerical services.....		4.75
		Emily Boyd, clerical service.....		5.25
		Margie Murchison, clerical service.....		1.20
		Mabel C. Robertson, clerical service.....		.85
	30.	W. S. Rankin, expenses for November.....		7.09
	23.	Carroll Adv. & Letterwriting Co., stenographic service..		12.20
	31.	Nat. Con. on Race Betterment, books.....		1.00
 1914.				
Jan.	2.	Dr. P. W. Covington, appropriation Bur. Co. Health....		500.00
		Warren H. Booker, appropriation Bur. Eng. and Edu....		1,200.00
		Mabel Massey, appropriation Bureau Accounting.....		400.00
	5.	Mrs. H. K. McIntyre, Red Cross seals.....		5.00
		W. S. Rankin, traveling expenses.....		30.46
	6.	Western Union Telegraph Co., telegrams.....		1.73
		Plummer's Stables, livery.....		2.00
	7.	Raleigh Motor Car & Machine Co., Prestolite.....		2.10
		Carroll Adv. & Letterwriting Co., copying.....		4.50
		Carroll Adv. & Letterwriting Co., stenographic service..		5.93
	13.	Office Stationery Co., office supplies.....		.90
		American Medical Association, annual dues.....		5.00
	16.	Southern Express Co., express.....		1.20
		C. E. Johnson, rent.....		30.00

Jan.	24.	P. P. Jacobs, one year's subscription.....	\$ 1.00
		National Housing Association, books.....	2.00
	30.	W. S. Rankin, salary .....	250.00
		Nellie B. Poole, salary.....	65.00
	31.	C. E. Johnson, President, rent.....	30.00
Feb.	3.	Southern Express Co., express.....	.45
		James E. Thiem, office supplies.....	3.80
	9.	Southern Bell Telephone & Telegraph Co., telephone....	1.25
		Western Union Telegraph Co., telegrams.....	5.44
	10.	Bureau of Accounting, salaries.....	11.40
		Southern Bell Telephone & Telegraph Co., telephones...	7.00
	17.	Plummer's Stables, livery.....	2.00
	23.	W. S. Rankin, traveling expenses.....	36.50
		News & Observer Publishing Co., books.....	2.00
		Automobile Supply Co., Presto tank.....	2.00
	24.	Southern Bell Telephone & Telegraph Co., telephones ...	7.00
	26.	Bureau of Accounting, appropriation.....	250.00
		Bureau of Engineering & Education, appropriation.....	1,050.00
		Bureau of County Health Work, appropriation.....	400.00
		Bureau of Hookworm Fund, appropriation.....	1,000.00
	27.	American Medical Association, transactions.....	1.00
	28.	May Reynolds, salary.....	65.00
		W. S. Rankin, salary.....	250.00
		Wm. H. Baldwin, Treasurer, annual dues.....	5.00
Mar.	10.	Weathers Furniture Co., desk.....	33.00
		Southern Express Co., express.....	6.20
		Plummer's Stables, livery.....	3.00
		Southern Bell Telephone & Telegraph Co., telephones...	13.75
		Postal Telegraph & Cable Co., telegrams.....	1.69
		C. E. Johnson, President, rent.....	30.00
	11.	Jas. E. Thiem, office supplies.....	.75
	16.	W. S. Rankin, expenses.....	10.43
		Swindell-Barnes, rubber stamps.....	.70
		Macy & Lawler, chart.....	2.00
		J. C. Brantley, supplies.....	1.00
		National Association Study & Prevention of T. B., dues	5.00
		Southern Sociological Congress, dues.....	2.00
		W. O. Spencer, traveling expenses.....	19.00
	17.	Powell & Powell, fuel.....	74.00
	19.	W. G. Briggs, Postmaster, postage.....	10.00
		Western Union Telegraph Co., telegrams.....	6.51
	25.	American Genetic Association, dues.....	2.00
		Bureau of Engineering & Education, multigraphing.....	2.90
	31.	Miss M. Brainard, subscription.....	1.00
		W. S. Rankin, salary.....	250.00
		May Reynolds, salary.....	55.00
		Mabel Massey, salary.....	25.00
Apr.	1.	W. S. Rankin, expenses.....	13.11
		Southern Express Co., express.....	1.49
	2.	Bureau of Eng. & Edu., multigraphing.....	17.35
		James E. Thiem, office supplies.....	1.90

Apr.	3.	M. Rosenthal & Co., paper towels.....	\$ 3.90
	6.	G. H. Dortch & Bro., insurance.....	31.50
		Alfred R. Kimball, membership dues.....	3.00
		Southern Bell Telephone & Telegraph Co., telephones....	12.65
		Farmer-Cole Plumbing Co., repairs.....	.50
		J. C. Brantley, alcohol.....	.50
		Plummer's Stables, livery.....	1.50
		Oxford University Press, American Branch, books.....	1.50
		C. E. Johnson, President, rent.....	30.00
	7.	Powell & Powell, fuel.....	23.25
		W. G. Briggs, Postmaster, postal guide.....	3.00
	17.	W. G. Briggs, Postmaster, postage.....	10.00
		American Association for Labor Legislation, dues.....	3.00
		Western Union Telegraph Co., telegrams.....	3.76
		Postal Telegraph & Cable Co., telegram.....	.91
		A. W. Shaw Co., subscription.....	2.00
	22.	W. G. Briggs, postmaster, postage.....	36.00
	23.	May Reynolds, salary.....	35.00
	30.	W. S. Rankin, salary.....	250.00
		Mabel Massey, salary.....	25.00
		C. E. Johnson, president, rent.....	30.00
		May Reynolds, salary.....	20.00
		Southern Bell Telephone and Telegraph Co., telephones.....	.40
		Dr. W. S. Rankin, expenses.....	85.52
May	2.	Powell & Powell, fuel.....	4.65
	4.	W. S. Rankin, expenses.....	144.93
	5.	M. Rosenthal & Co., supplies.....	7.66
	5.	J. C. Brantley, supplies.....	3.85
		Western-Union Telegraph Co., telegram.....	4.33
	12.	E. B. Earnshaw, salaries.....	17.00
		F. A. Davis Co., books.....	2.50
	13.	Bureau of Engineering and Education, mult.....	3.20
	18.	American Social Hygiene Association, books.....	.90
		So. Express Co., express.....	.93
	23.	American Medical Association, books.....	7.00
	25.	Thos. H. Briggs & Sons, supplies.....	1.25
	26.	Nellie B. Poole, stenographic work.....	8.00
	29.	W. S. Rankin, salary.....	250.00
		C. E. Johnson, President, rent.....	30.00
		W. G. Briggs, Postmaster, postage.....	10.00
		Mary Robinson, salary.....	85.48
		J. L. Ludlow, expenses.....	13.85
June	1.	May Reynolds, salary.....	50.00
		Southern Express Co., express.....	.40
		Southern Bell Telephone & Telegraph Co., telephone....	15.35
	3.	James E. Thiem, office supplies.....	.50
		Western Union Telegraph Co., telegrams.....	3.51
	4.	W. S. Rankin, traveling expenses.....	47.90
	8.	Remington Typewriter Co., typewriter ribbon.....	.75
	9.	Dr. Geo. M. Cooper, expenses.....	8.50
		Mrs. H. E. Cole, clerical service.....	2.65

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June	10.	Southern Express Co., express.....	\$ .50
	11.	Bureau of Engineering and Education, multigraph.....	11.10
		W. G. Briggs, P. M., postage.....	10.00
	16.	W. S. Rankin, salary.....	250.00
		Mary Robinson, salary.....	100.00
	30.	A. A. Kent, traveling expenses.....	42.80
		T. E. Anderson, traveling expenses.....	34.65
		Chas. O'H. Laughinghouse, traveling expenses.....	21.85
		J. L. Ludlow, traveling expenses.....	15.25
		Warren H. Booker, traveling expenses.....	29.10
		J. Howell Way, traveling expenses.....	51.85
		Busbee & Busbee, premium on bond.....	115.00
		Mabel Massey, salary.....	66.67
		Mabel Massey, salary.....	100.00
		C. E. Johnson, Pres., rent.....	30.00
		R. E. Flack, traveling expenses.....	5.85
		P. W. Covington, salary.....	208.33
		Bureau of Engineering and Education, appropriation...	1,000.00
		Bureau County Health, appropriation.....	750.00
		Bureau of Accounting, appropriation.....	100.00
July	2.	Alfred Williams & Co., office supplies and books.....	7.65
		Jas. E. Thiem, office supplies.....	1.15
		A. L. Foster, water.....	5.00
		National Housing Association, books.....	2.00
		Raleigh Motor Car and Machine Co., rent of car.....	5.00
		W. S. Rankin, traveling expenses.....	33.71
		Carroll Advertising & Letter Writing Co., steno. service	24.43
		Alfred Williams & Co., office supplies.....	1.75
	3.	Southern Bell Telephone & Telegraph Co., telephone....	7.75
		Western-Union Telegraph Co., telegrams.....	1.11
		M. Rosenthal & Co., paper towels.....	4.00
	7.	Lea & Febiger, subscription.....	3.00
		W. G. Briggs, P. M., postage.....	11.00
		Farmer-Cole Plumbing Co., repairs.....	.60
		Winston Davis, charts.....	10.00
	14.	Scientific Temperance Journal, subscription.....	.60
		Postal Telegraph & Cable Co., telegram.....	.64
	18.	Bureau of Engineering and Education, multigraph.....	6.95
	22.	E. J. Wood, traveling expenses.....	21.90
	27.	Carroll Advertising & Letter Writing Co., steno. service	13.75
	30.	W. S. Rankin, salary.....	250.00
		Bureau of Publications, books.....	2.15
		C. E. Johnson, President, rent.....	30.00
		W. G. Briggs, Post Master, postage.....	10.00
		Alfred Williams & Co., office supplies.....	3.60
		W. S. Rankin, traveling expenses.....	28.65
	31.	May Reynolds, stenographic work.....	11.75
Aug.	1.	A. L. Foster, water.....	3.00
	3.	Letter shop, stenographic work.....	8.30
		Royall & Borden, folders.....	2.10
		Edwards & Broughton Printing Co., cut.....	9.00

Aug.	3.	M. Rosenthal & Co., paper towels.....	\$ 4.00
		Frances Wilson, stenographic work.....	4.00
		Jas. E. Thiem, clips.....	1.00
		Southern Express Co., express.....	1.04
	6.	Southern Bell Telephone & Telegraph Co., telephone....	5.50
		Western Union Telegraph Co., telegrams.....	2.74
		J. C. Ellington, framing picture.....	1.25
		Carroll Adv. & Letterwriting Co., stenographic work...	4.10
	8.	Mrs. H. E. Cole, clerical work.....	2.10
	18.	Remington Typewriter Co., typewriter ribbon.....	.75
	31.	W. S. Rankin, traveling expenses.....	97.00
		Bureau of Engineering and Education, appropriation... 1,750.00	
		Bureau of Accounting, appropriation.....	250.00
		W. S. Rankin salary.....	250.00
		C. E. Johnson, president, rent.....	40.00
		E. M. Uzzell & Co., printing and supplies.....	43.19
		Sarah Grace Allen, salary.....	60.00
		H. S. Storr, dictaphone repairs.....	8.50
Sept.	1.	A. L. Foster, water.....	3.00
	2.	Carroll Adv. & Letter Writing Co., stenographic work..	7.05
	3.	Southern Bell Telephone & Telegraph Co., telephone....	6.30
	5.	Western Union Telegraph Co., telegrams.....	1.99
		Postal Telegraph-Cable Co., telegram.....	.25
	9.	Bureau Engineering and Education, appropriation.....	1,500.00
		Bureau Accounting, appropriation.....	250.00
	11.	G. M. Cooper, traveling expenses.....	7.50
	30.	W. S. Rankin, salary.....	250.00
		Public Service Cup Co., individual cups.....	7.00
		Alice L. Glover, salary.....	14.00
		Marion Buffalo, carpenter work.....	9.00
Oct.	1.	W. S. Rankin, traveling expenses.....	31.02
		C. J. Wall, carpenter work.....	12.00
	2.	May Reynolds, stenographic work.....	4.00
		W. G. Briggs, Postmaster, postage.....	10.00
		Chas. O'H. Laughinghouse, traveling expenses.....	21.20
		D. T. Tayloe, traveling expenses.....	20.00
	3.	Warren H. Booker, cash advanced for moving expenses	54.50
		C. E. Johnson, President, rent.....	50.00
	6.	J. J. Johns, moving safe.....	20.00
		M. Rosenthal & Co., supplies.....	5.35
	8.	Edward C. Register, subscription.....	1.50
	10.	C. J. Wall, carpenter work.....	9.00
		Henry Comedy, labor.....	6.50
	12.	Alfred Williams & Co., books and supplies.....	3.85
		J. L. Ludlow, traveling expenses.....	14.25
		Southern Express Co., express.....	1.20
		Macy & Lawler, lettering doors.....	3.50
		Hart-Ward Hardware Co., door stops.....	13.00
		T. E. Anderson, traveling expenses.....	30.60
		Powell & Powell, ice.....	2.59
		A. A. Kent, traveling expenses.....	28.22

Oct.	13.	Sarah Grace Allen, salary.....	\$ 2.00
		Thos. H. Briggs & Sons, nails.....	1.06
		E. J. Wood, traveling expenses.....	19.60
		J. Howell Way, traveling expenses.....	39.05
	14.	Southern Bell Telephone & Telegraph Co., telephone....	5.55
	19.	Alice L. Glover, salary.....	40.00
		Western Union Telegraph Co., telegrams.....	4.34
	21.	Mrs. H. E. Cole, addressing postcards.....	2.50
	24.	G. M. Cooper, expenses.....	8.50
		Chas. O'H. Laughinghouse, traveling expenses.....	16.05
	27.	Ernest R. Carroll, supplies.....	1.35
	30.	W. S. Rankin, traveling expenses.....	32.71
	31.	W. S. Rankin, salary.....	250.00
		Alice L. Glover, salary.....	20.00
Nov.	2.	M. Rosenthal & Co., supplies.....	8.00
	3.	Royall & Borden Furniture Co., mirror.....	3.25
	5.	J. C. Brantley, supplies.....	.50
	7.	C. J. Wall, work on coat closet.....	26.10
	9.	Boylan-Pearce Co., cheesecloth.....	3.38
		T. F. Brockwell, repairs.....	4.00
		Southern Bell Telephone & Telegraph Co., telephone...	5.00
		American Medical Association, books.....	.30
		A. L. Foster, water.....	3.50
	11.	Western Union Telegraph Co., telegrams.....	3.87
		Jas. E. Thiem, office supplies.....	15.25
	13.	Baker-Thompson Lumber Co., lumber for closet.....	24.87
		Dobbin-Ferrall Co., door mat.....	3.00
		American Statistical Association, dues.....	4.00
	16.	Scott Paper Co., paper towels and holder.....	6.77
	19.	W. G. Briggs, Post Master, postage.....	10.00
		D. C. Absher, expenses.....	5.28
		Alice L. Glover, salary.....	32.50
		Mrs. H. E. Cole, clerical service.....	2.50
	23.	Western Union Telegraph Co., telegram.....	.25
		The Survey, subscription.....	3.00
		American Medical Association, books.....	1.00
		W. S. Rankin, membership dues.....	10.00
	27.	Alice L. Glover, salary.....	32.50
		W. S. Rankin, salary.....	250.00
	28.	R. L. Bryan Co., books.....	5.00
		C. J. Wall, carpenter work.....	7.20
	30.	J. Howell Way, traveling expenses.....	38.35
		Bureau of Engineering & Education, multigraphing....	10.36
		Bureau of Engineering and Education, appropriation...	900.00
		Bureau of Accounting, appropriation.....	93.01

1912.		RECEIPTS.	
Dec.	1.	Balance .....	\$ 827.37
	13.	State Treasurer.....	2,000.00
	30.	Hookworm Fund.....	.95
1913.			
Jan.	25.	State Treasurer .....	2,000.00
	28.	Credit check 518, returned after books had been audited by Mr. Abbott.....	5.00
Feb.	7.	State Treasurer .....	2,000.00
Mar.	7.	Hookworm Fund .....	4.50
	12.	State Treasurer.....	1,000.00
	28.	State Treasurer .....	2,000.00
		Rebate Multigraph Sales Co.....	15.00
Apr.	30.	State Treasurer.....	2,000.00
		Hookworm Fund.....	.25
June	18.	State Treasurer.....	2,000.00
	23.	Laboratory of Hygiene.....	45.00
July	5.	State Appropriation.....	2,000.00
Aug.	5.	State Appropriation.....	2,000.00
	11.	Henning & Son.....	8.31
Sept.	2.	State Appropriation.....	2,000.00
Oct.	7.	State Appropriation.....	2,000.00
Nov.	12.	State Appropriation.....	4,666.66
	18.	State Appropriation .....	5,833.34
	26.	Printing Fund.....	416.85
1913.			
Dec.	31.	State Treasurer .....	2,000.00
Jan.	2.	State Treasurer .....	2,000.00
Feb.	20.	State Treasurer .....	3,500.00
Apr.	10.	Cash for typewriter.....	20.00
May	28.	State Treasurer .....	1,000.00
June	17.	State Treasurer.....	4,000.00
July	30.	State Treasurer .....	1,000.00
Sept.	8.	State Treasurer .....	1,000.00
Sept.	5.	Cash for book.....	2.00
Oct.	14.	Refund on insurance.....	3.00
Nov.	14.	Cash for stoves.....	13.00
	30.	Bureau of Vital Statistics, bookkeeping.....	120.00
Sept.	11.	Bureau County Health, refund on appropriation.....	<u>174.49</u>

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*Bureau of Engineering and Education.*

1913.

## DISBURSEMENTS.

Dec.	9.	Warren H. Booker, traveling expenses.....	\$ 19.75
		Warren H. Booker, cash advanced.....	63.14
	8.	W. G. Briggs, P. M., postage.....	72.00
	9.	Weathers Furniture Co., desk.....	33.00
		American Multigraph Sales Co., supplies.....	1.47
		W. G. Briggs, Post Master, postage.....	4.38
		Thompson Electrical Co., batteries.....	1.00
		J. C. Brantley, Supplies.....	1.05
		J. R. Ferrall & Co., matches.....	.50
		Thos. H. Briggs & Sons, supplies.....	4.21
		M. Rosenthal & Co., oil.....	.75
		Carolina Hardware Co., supplies.....	3.60
		Ellington Lumber Co., lumber.....	16.09
		Carolina Power & Light Co., lights .....	2.02
	11.	Office Stationery Co., office supplies.....	10.80
		Mrs. H. K. McIntyre, red cross seals.....	5.00
		Baker-Thompson Lumber Co., lumber.....	1.50
	15.	Dobbin-Ferrall Co., supplies.....	6.67
		Haywood Poole, wages.....	12.50
	16.	Warren H. Booker, salary.....	175.00
		Mary Robinson, salary.....	75.00
		Lydia Sorrell, salary .....	40.00
		Inez Hufham, salary.....	40.00
		Athalie May, clerical service.....	11.25
		Jessie Knight, clerical service.....	10.00
	17.	S. L. Rotter, writing press articles.....	18.50
	20.	Western Union Telegraph Co., telegrams.....	1.00
		S. W. Holloway, exhibit material.....	3.50
		Helen Batchelor, clerical work.....	7.25
	22.	So. Express Co., express.....	11.77
	24.	Haywood Poole, wages.....	5.00
	30.	Warren H. Booker; traveling expenses.....	6.75
	31.	W. R. Macy, lettering card.....	1.50
		Remington Typewriter Co., typewriter.....	35.00
		A. L. Foster, water.....	2.00
		Haywood Poole, wages.....	7.50

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Jan.	2.	W. G. Briggs, Postmaster, postage.....	29.87
		Electrical Eng. & Contracting Co., repairs.....	.50
		Dobbin-Ferrall Co., curtains.....	4.73
	3.	Western Union Tel. Co., telegrams.....	1.50
	6.	Southern Railway Co., freight.....	1.27
		The Tyree Studio, prints.....	6.00
		T. F. Brockwell, repairs.....	.50
		Seaboard Air Line Railway, freight .....	5.94
		Warren H. Booker, petty cash.....	5.00

## NORTH CAROLINA BOARD OF HEALTH

Jan.	7.	W. G. Briggs, Postmaster, postage.....	\$ 53.00
	8.	Goodwin-Smith Furniture Company, mirror.....	3.25
	12.	Southern Express Company, express.....	5.45
	13.	Office Stationery Co., office supplies.....	2.25
		Swindell-Barnes Co., rubber stamp.....	.50
		American Multigraph Sales Co., supplies.....	3.05
	15.	Dr. W. E. Richardson, refund.....	1.60
	16.	Haywood Poole, wages.....	12.50
	20.	Addressograph Co., supplies.....	73.50
		Jessie Knight, clerical service.....	10.00
		Warren H. Booker, petty cash.....	10.00
	21.	Helen Batchelor, clerical service.....	14.00
	22.	Mabel Massey, cash advanced.....	1.85
	27.	Baxter Durham, 2 cots.....	5.50
	30.	S. Spencer Moore, filing cases and supplies.....	62.51
		Bright Envelope Co., envelopes.....	5.55
		Warren H. Booker, salary.....	175.00
		Mary Robinson, salary.....	75.00
		Lydia Sorrell, salary.....	40.00
		Inez Hufham, salary.....	40.00
		Turner Powell, salary.....	11.25
		Jessie Knight, clerical service.....	4.50
	31.	Barber & Towler, cart.....	12.50
Feb.	5.	Southern Express Co., express.....	4.04
		W. G. Briggs, Post Master, postage.....	31.88
	4.	A. L. Foster, water.....	3.00
	5.	John F. Sweeney, lantern slides.....	5.75
		Carolina Power & Light Co., lights.....	9.61
		Office Stationery Co., supplies.....	2.25
	7.	Scientific Temperance Federation, lantern slides.....	30.20
		Western Union Telegraph Co., telegrams.....	1.10
	11.	American Multigraph Sales Co., supplies.....	.25
		Thos. H. Briggs, & Sons, supplies.....	4.00
	16.	Turner Powell, wages.....	12.50
		Inez Hufham, salary.....	20.00
	19.	American Multigraph Sales Co., supplies.....	42.19
		W. G. Briggs, Post Master, postage.....	35.00
	20.	Warren H. Booker, petty cash.....	10.00
		American Multigraph Sales Co., supplies.....	13.96
	24.	Educational Exhibit Co., exhibit material.....	12.07
	27.	Warren H. Booker, salary.....	175.00
		Mary Robinson, salary.....	75.00
		Lydia A. Sorrell, salary.....	40.00
		Inez Hufham, salary.....	20.00
		Turner Powell, salary.....	12.50
		Helen Batchelor, clerical service.....	8.00
	28.	Carolina Power & Light Co., lights.....	14.00
Mar.	6.	Southern Express Co., express.....	1.14
		A. L. Foster, water.....	2.25
		Carolina Power & Light Co., lights.....	6.28

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Mar.	6.	So. Bell Telephone & Telegraph Co., long distance.....\$	.50
		W. G. Briggs, Post Master, postage.....	35.00
10.		Thos. A. Partin, supplies.....	6.10
		Educational Exhibition Co., bristol board.....	14.00
11.		W. A. Withers, analysis oxypathor powder.....	55.00
		Alfred Williams & Co., supplies.....	4.35
13.		Office Stationery Co., supplies.....	4.45
		Mabel Hawkins, clerical service.....	2.00
14.		Thos. H. Briggs & Sons, supplies.....	5.65
		Turner Powell, wages.....	7.80
		Joseph Littlejohn, wages.....	4.70
16.		Mary Robinson, salary.....	37.50
		Inez Hufham, salary.....	20.00
		H. E. Satterfield, drayage.....	6.67
26.		Educational Exhibition Co., prints.....	6.25
		American Multigraph Sales Co., supplies.....	40.56
30.		Mrs. L. W. Blanton, clerical service.....	1.50
		Mrs. W. H. Gilbert, clerical service.....	2.00
		Grace Crews, clerical service.....	3.00
		Marie Parker, clerical service.....	.38
		Warren H. Booker, salary.....	175.00
		Mary Robinson, salary.....	37.50
		Lydia A. Sorrell, salary.....	40.00
		Inez Hufham, salary.....	20.00
		William Hicks, salary.....	11.25
31.		American Water Works Association, dues.....	5.00
Apr.	1.	Carolina Power & Light Co., electric lights.....	5.26
		Southern Express Co., express.....	6.08
4.		Dobbin-Ferrall Co., oilcloth.....	.75
		Tyree, negatives and prints.....	4.00
		Toyland, basket.....	.75
		Jas. E. Thiem, supplies.....	1.90
		American Multigraph Sales Co., supplies.....	2.64
		Helen Batchelor, clerical work.....	4.00
		Thos. A. Partin & Co., supplies.....	3.55
		R. I. Poole, blue prints.....	3.43
		W. G. Briggs, Post Master, postage.....	25.00
		W. G. Briggs, Postmaster, postage.....	39.25
6.		Rochester Re-Inking Works, supplies.....	7.35
		Carroll Adv. & Letterwriting Co., clerical work.....	1.50
		Warren H. Booker, traveling expenses.....	13.24
11.		William Hicks, wages.....	12.50
15.		Doubleday, Page & Co., photo.....	1.00
		Addressograph Co., supplies.....	1.40
		Edwards & Broughton Co., paste.....	3.05
16.		P. M. Foltz, lantern slides.....	2.25
17.		J. J. Coats, lantern slide boxes.....	1.75
		E. C. Nordan, lantern slide boxes and repairs.....	13.15
23.		Survey Association, Inc., books.....	2.00
25.		Mary Robinson, salary.....	75.00
27.		W. G. Briggs, Postmaster, postage.....	34.00

Apr.	28.	The Scientific Temperance Federation, lecture.....	\$ 1.00
	30.	Warren H. Booker, salary.....	175.00
		Lydia A. Sorrell, salary.....	40.00
		Inez Hufham, salary.....	40.00
		William Hicks, salary.....	12.50
		Mrs. H. E. Cole, clerical work.....	8.00
		D. Appleton & Co., books.....	1.25
May	1.	Carolina Power & Light Co., lights.....	3.97
	2.	Dobbin-Ferrall Co., supplies.....	2.34
	5.	Western Union Tel. Co., telegram.....	.50
		W. G. Briggs, Post Master, postage.....	33.88
	6.	Seaboard Air Line Railway, freight.....	1.26
		John F. Sweeney, lantern slides.....	1.02
		Thos. A. Partin Co., cheesecloth.....	3.00
	9.	W. G. Briggs, Post Master, postage.....	20.00
	13.	American Multigraph Sales Co., supplies.....	2.50
		Jas. E. Thiem, supplies.....	21.75
		Mary Sherwood, clerical service.....	3.00
	14.	Southern Express Co., express.....	4.25
		Warren H. Booker, petty cash.....	10.00
		Mary Robinson, salary.....	14.52
		Committee for Prevention of Blindness, lantern slides..	17.50
	15.	Mrs. H. E. Cole, clerical work.....	12.50
		William Hicks, wages.....	12.50
	26.	Harper & Bros., books.....	1.00
	28.	Lydia Sorrell, salary.....	40.00
		Inez Hufham, salary.....	40.00
		Warren H. Booker, salary.....	175.00
		William Hicks, salary.....	12.50
		W. G. Briggs, Postmaster, postage.....	52.00
		The Scientific Temperance Federation, lantern slides..	8.25
June	2.	Southern Express Co., express.....	.71
		Raleigh Electric Co., repairs.....	1.50
		May Reynolds, salary.....	10.00
		W. G. Briggs, Post Master, postage.....	38.68
	3.	Jas. E. Thiem, supplies.....	2.65
		S. Spencer Moore Co., office furniture.....	29.93
		Edwards & Broughton Printing Co., paste.....	1.00
		Peerless Paste Co., paste.....	1.25
		Educational Exhibition Co., fly pins.....	.75
	4.	Western Union Telegraph Co., telegrams.....	1.00
		R. I. Poole, salary.....	11.75
		W. G. Briggs, Post Master, postage.....	75.00
	5.	Thos. A. Partin Co., cheesecloth.....	3.25
		Warren H. Booker, traveling expenses.....	33.60
	6.	Thos. H. Briggs & Sons, supplies.....	2.70
		Carolina Power & Light Co.,.....	3.15
		Mrs. H. E. Cole, clerical service.....	4.00
	9.	Thos. H. Briggs & Sons, supplies.....	2.80
		Manly W. Tyree, photograph.....	2.00

June	10.	American Multigraph Sales Co., type.....\$	5.10
		Frederick A. Stokes Co., books.....	.75
	11.	E. Logan, salary and supplies.....	20.00
		Metropolitan Engraving Co., drawings.....	28.91
	13.	William Hicks, wages.....	12.50
	15.	Inez Hufham, salary.....	20.00
	15.	Mrs. H. E. Cole, clerical service.....	5.00
	18.	Bureau of Engineering and Education, petty cash.....	10.00
		W. G. Briggs, post master, postage.....	40.00
	26.	Alfred Williams & Co., books.....	3.79
	27.	Minnie Batchelor, clerical work.....	1.35
	29.	Margaret Batchelor, clerical work.....	1.00
	30.	Inez Hufham, salary.....	40.00
		Kate M. Herring, salary.....	31.67
		Warren H. Booker, salary.....	175.00
		Lydia Sorrell, salary.....	40.00
		May Reynolds, salary.....	60.00
		William Hicks, salary.....	12.50
		Edwards & Broughton Printing Co., plates.....	17.00
		Southern Bell Telephone & Telegraph Co., telephone....	1.10
		Dr. Arch Cheatham, refund.....	3.00
July	1.	Carolina Power & Light Co., fan and lamp.....	10.00
	2.	Barber & Towler, lantern slide boxes.....	4.25
	3.	Merle Ellington, clerical work.....	5.00
	6.	J. C. Brantley, supplies .....	2.25
		L. P. Denmark, drawings.....	6.70
		Thos. A. Partin Co., cheesecloth.....	3.15
		Western Newspaper Union, cuts.....	2.30
		W. G. Briggs, Post Master, postage.....	55.28
		W. G. Briggs, Post Master, postage.....	50.00
		Jas. E. Thiem, supplies.....	.75
		Western Union Telegraph Co., telegram.....	.79
		Southern Express Co., express.....	1.95
		Carolina Power & Light Co., lights.....	3.75
		Winston Davis, charts.....	3.25
	7.	Thos. H. Briggs & Sons, lantern slide boxes.....	2.95
	8.	American Type Founders Co., type.....	1.76
	9.	W. G. Briggs, Postmaster, postage.....	43.12
	15.	L. P. Denmark, salary.....	7.20
		William Hicks, salary.....	12.50
		Merle Ellington, clerical work.....	9.00
	20.	Mrs. H. E. Cole, clerical work.....	7.50
		May Reynolds, salary.....	30.00
	27.	G. A. Edwards, box for baby illusion.....	4.44
	31.	Warren H. Booker, traveling expenses.....	29.85
		Warren H. Booker, salary.....	175.00
		Kate M. Herring, salary.....	50.00
		May Reynolds, salary.....	30.00
		Merle Ellington, clerical service.....	14.00
		Alfred Williams & Co., thumb tacks.....	2.25
		Engineering News, books.....	5.90

July	31.	W. G. Briggs, Postmaster, postage.....	\$ 50.00
		Lydia Sorrell, salary.....	45.00
		William Hicks, salary.....	12.50
Aug.	1.	Carolina Power & Light Co., lights.....	3.98
		Hunter-Rand Co., cheesecloth.....	2.76
	4.	J. C. Brantley, benzine.....	.50
		E. M. Uzzell & Co., supplies and printing.....	2.47
		Southern Express Co., express.....	.56
	7.	Manly Tyree, photographs.....	16.00
		W. G. Briggs, Post Master, postage.....	19.83
	10.	Merchant National Bank, refund.....	2.00
		Seaboard Air Line Railway, freight.....	3.36
	11.	Addressograph Co., supplies.....	107.42
	15.	William Hicks, salary.....	12.50
		May Reynolds, salary.....	30.00
		Merle Ellington, clerical work.....	15.00
	25.	W. G. Briggs, Post Master, postage.....	24.00
	26.	Addressograph Co., supplies.....	34.65
	28.	Review and Herald Publishing Co., cut.....	.75
		L. P. Denmark, salary.....	4.20
	29.	R. I. Poole, salary.....	2.10
	31.	Warren H. Booker, salary.....	175.00
		Kate M. Herring, salary.....	50.00
		Lydia Sorrell, salary.....	45.00
		Merle Ellington, salary.....	15.00
		Jessie Knight, salary.....	15.00
		William Hicks, salary.....	12.50
		May Reynolds, salary.....	30.00
Sept.	1.	Southern Bell Telephone & Telegraph Co., telephone....	1.20
		Carolina Power & Light Co., lights.....	2.28
		Edwards & Broughton Printing Co., paste.....	1.65
		Southern Express Co., express.....	3.03
		W. G. Briggs, Post Master, postage .....	33.17
		Thompson Electrical Co., repairs.....	1.50
		Carolina Blue Printers, blue prints.....	1.25
	4.	Warren H. Booker, traveling expenses.....	5.50
	5.	Western Union Telegraph Co., telegram.....	.43
		H. S. Storr, pencil sharpener.....	3.00
		James E. Thiem, shipping tags.....	.25
	12.	Ed. Hughes, freight and drayage.....	.75
	14.	Warren H. Booker, petty cash.....	10.00
		W. G. Briggs, Post Master, postage.....	20.88
	15.	William Hicks, salary.....	12.50
		May Reynolds, salary.....	30.00
	16.	Jessie Knight, salary.....	15.00
		Merle Ellington, salary.....	15.00
		Inez Hufham, salary.....	22.50
		L. M. Craig, poster design.....	8.00
	17.	W. G. Briggs, Postmaster, postage.....	50.00
	18.	The American City, subscription.....	2.00
	19.	Arthur Traylor, salaries.....	10.63

Sept.	21.	International Harvester Co., charts.....	\$ 40.00
	30.	Warren H. Booker, salary.....	175.00
		William Hicks, salary.....	12.50
		Merle Ellington, clerical service.....	2.96
		Jessie Knight, salary.....	16.21
		Kate M. Herring, salary.....	50.00
		Lydia Sorrell, salary.....	51.98
		May Reynolds, salary.....	37.50
		Inez Hufham, salary.....	30.38
Oct.	2.	Isaac Traylor, salary.....	8.00
		W. G. Briggs, Post Master, postage.....	30.00
	5.	Manly Tyree, photographs.....	5.50
		Sherwood Higgs, freight and drayage.....	5.11
		Walter W. Roach, book.....	1.00
	6.	Warren H. Booker, cash advanced.....	10.50
		Thos. A. Partin Co., cheesecloth.....	6.18
		James E. Thiem, supplies .....	3.20
		J. C. Brantley, benzine.....	.40
		Edwards & Broughton Printing Co., paste.....	.90
		W. G. Briggs, Post Master, postage.....	49.90
		Baker Thompson Lumber Co., lumber.....	20.52
	10.	C. J. Wall, carpenter work.....	5.85
		C. J. Wall, carpenter work.....	14.40
		Carolina Power & Light Co., lights.....	3.99
	12.	Macy & Lawler, lettering doors.....	7.00
		Southern Express Company, express.....	5.10
		Thos. H. Briggs & Sons, castors.....	8.26
	15.	William Hicks, salary.....	12.50
		Inez Hufham, salary.....	25.00
		Kate M. Herring, salary.....	25.00
		Jessie Knight, clerical service.....	15.00
		May Reynolds, salary.....	32.50
		Ribbon Refresher Co., re-inker.....	25.00
	16.	The Scarborough Co., maps.....	4.90
		T. F. Brockwell, repairs,.....	3.75
		Peerless Paste Company, paste.....	1.25
	17.	C. J. Wall, carpenter work.....	39.00
	23.	Alex. A. Pickell, electrical work.....	8.25
		International Magazine Co., books.....	.50
	24.	C. J. Wall, carpenter work.....	38.45
	26.	Warren H. Booker, petty cash.....	10.00
	28.	Engineering & Contracting Co., books.....	2.00
		Education Exhibition Co., exhibition material.....	18.27
		Jessie Knight, clerical work.....	2.00
		Chicago Tribune, subscription.....	6.50
		Alfred Williams & Co., books and supplies.....	11.75
	31.	Lydia Sorrell, salary.....	50.00
		Kate M. Herring, salary.....	25.00
		May Reynolds, salary.....	32.50
		Warren H. Booker, salary.....	175.00
		Inez Hufham, salary.....	25.00

Oct.	31.	William Hicks, salary.....	\$ 12.50
		W. G. Briggs, Post Master, postage.....	50.00
		C. J. Wall, carpenter work.....	27.90
		Macy & Lawler, exhibit material.....	49.75
		Ivory Horton, salary.....	12.50
Nov.	3.	Jolly & Wynne Jewelry Co., clock.....	3.00
		H. S. Storr, dictaphone repairs.....	10.00
		Oldham & Worth, exhibit material.....	3.39
		Southern Express Co., express.....	6.07
		Raleigh Iron Works, exhibit material.....	10.80
		James E. Thiem, supplies.....	5.05
		Hunter-Rand Co., exhibit material.....	1.25
		Alderman Toy & China Co., exhibit material.....	1.35
		J. C. Brantley, exhibit material.....	6.00
	4.	Derby & Orrell, painting cases.....	12.00
	6.	Thompson Electrical Co., exhibit material.....	8.60
		W. G. Briggs, Post Master, postage.....	34.34
		James E. Thiem, exhibit material.....	.50
		Hart-Ward Hardware Co., exhibit material.....	1.35
		Thos. A. Partin Co., cheesecloth.....	3.98
		Jos. C. Ellington, exhibit material.....	1.00
	7.	C. J. Wall, carpenter work.....	18.00
		Boylan-Pearce Co., exhibit material.....	1.09
		Jolly & Wynne Co., exhibit material.....	1.50
		Western Union Telegraph Company, telegrams.....	2.30
	10.	Educational Exhibition Co., exhibit material.....	8.50
		Southern Bell Telephone & Telegraph Co., telephone....	2.85
		Elizabeth McCormick Memorial fund, print.....	.50
	12.	Automobile Supply Company, batteries.....	1.50
		Dobbin-Ferrall Co., exhibit material.....	7.77
		E. Logan, exhibit material.....	2.50
		Baker-Thompson Lumber Co., lumber.....	44.00
	13.	Scott Paper Co., towel holders.....	2.25
	14.	C. J. Wall, work on exhibit.....	34.80
		Kate M. Herring, salary.....	25.00
		Inez Hufham, salary.....	25.00
		Ivory Horton, salary.....	12.50
		Willie M. High.....	12.50
	20.	Seaboard Air Line Railway, freight.....	40.74
		R. I. Poole, salary.....	2.60
		Educational Exhibition Co., exhibit material.....	5.00
	21.	S. A. L. Railway Co., freight.....	10.71
		C. J. Wall, salary.....	46.30
	24.	Warren H. Booker, salary.....	175.00
		Kate M. Herring, salary.....	25.00
		May Reynolds, salary.....	65.00
		Lydia Sorrell, salary.....	50.00
		Inez Hufham, salary.....	25.00
		Willie High, salary.....	12.50
		W. G. Briggs, Postmaster, postage.....	40.00
		Raleigh Electric Co., exhibit material.....	18.50

Nov. 24.	Blanche Baugh, clerical work.....	\$ 1.75
	May Reynolds, stenographic work.....	.50
	Inez Hufham, clerical work.....	10.50
	Lydia Sorrell, clerical work.....	6.00
	Elsie Yates, clerical work.....	7.75
	Mrs. Roles, clerical work.....	2.30
	C. J. Wall, work on exhibit.....	12.00
	Warren H. Booker, expenses and cash advanced.....	21.10
	Mrs. L. W. Blanton, exhibit material.....	5.00
	Mrs. Warren H. Booker, exhibit material.....	7.50

## 1913.

## RECEIPTS.

Dec. 31.	Bulletins .....	'3.00
1914.		
Jan. 31.	Check Executive Department.....	1,200.00
	Check Hookworm Commission, postage.....	8.57 ✓
Feb. 28.	Vital Statistics, multigraphing.....	102.03 ✓
	Executive Department .....	1,050.00
Mar. 31.	Cash for cut.....	.50
Apr. 30.	Cash for leaflets, multigraphing, etc.....	45.63
May 31.	Cash, multigraphing, \$41.35; leaflets, \$1.60.....	42.95
June 27.	Executive Department.....	1,000.00
30.	Vital Statistics, multigraphing.....	48.29
	Multigraphing, etc.....	35.50
July 18.	Executive Department, multigraphing.....	6.95
31.	Multigraphing, etc.....	35.50
Aug. 31.	Executive Department .....	1,750.00
	Multigraphing .....	10.15
Sept. 9.	Executive Department .....	1,500.00
Oct. 31.	Postage .....	15.93
Nov. 27.	Executive Department .....	900.00
30.	Multigraphing, etc. ....	173.11
	Hookworm Commission, postage.....	6.49
		\$ 34.51
		34.51 ✓
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*Bureau of Accounting.*

		DISBURSEMENTS.	
Dec.	16.	Mabel Massey, salary.....	\$ 25.00
		T. Peyton Brown, salary.....	50.00
	27.	T. Peyton Brown, traveling expenses.....	8.00
	30.	W. G. Briggs, Postmaster, postage.....	19.86
1914.			
Jan.	1.	Royall & Borden Furniture Co., desk and stool.....	30.75
	6.	Office Stationery Co., supplies.....	36.25
	10.	T. Peyton Brown, salary.....	20.00
	14.	W. G. Briggs, Postmaster, postage.....	5.39
	15.	W. G. Briggs, Postmaster, postage.....	10.78
	17.	T. Peyton Brown, salary.....	10.00
	30.	T. Peyton Brown, salary.....	30.00
		Mabel Massey, salary.....	25.00
Feb.	3.	Office Stationery Co., supplies.....	3.85
		T. F. Brockwell, repairs.....	.75
	5.	Mamie C. Turner, salary.....	2.00
	6.	E. B. Earnshaw, salary and expenses.....	11.40
	7.	T. Peyton Brown, salary.....	15.00
		Alfred Williams & Co., books.....	4.25
	14.	T. Peyton Brown, salary.....	15.00
		John Sanders, labor.....	1.13
	21.	T. Peyton Brown, salary.....	15.00
	28.	T. Peyton Brown, salary.....	15.00
		Mabel Massey, salary.....	25.00
Mar.	2.	Carroll Adv. & Letterwriting Co., stenographic work....	28.65
	16.	James E. Thiem, supplies.....	10.20
	18.	J. E. Mitchell, stool.....	.75
	19.	W. G. Briggs, Postmaster, postage.....	4.00
	31.	Mabel Massey, salary.....	75.00
Apr.	6.	James E. Thiem, supplies.....	3.50
	30.	Mabel Massey, salary.....	75.00
May	15.	Hattie Heflin, salary.....	.75
		Hugh Heflin, salary.....	1.00
	22.	Bureau of Engineering and Education, multigraphing..	2.35
	25.	Bernard & Goodno, salary.....	5.00
June	2.	James E. Thiem, supplies.....	.85
	3.	T. Peyton Brown, salary.....	100.00
	9.	Alfred Williams & Co., ledger.....	6.00
July	1.	Alfred Williams & Co., supplies.....	1.20
		James E. Thiem, supplies.....	3.15
	3.	Carolina Power & Light Co., fan.....	12.75
		Alfred Williams & Co., books.....	4.00
	7.	W. G. Briggs, Postmaster, postage.....	10.00
	30.	Mary Robinson, salary.....	100.00
Aug.	3.	James E. Thiem, supplies.....	3.50
		W. G. Briggs, Postmaster, postage.....	10.00

Aug.	29.	Mary Robinson, traveling expenses.....	\$ 4.25
	31.	Mary Robinson, salary.....	100.00
		T. P. Brown, salary.....	30.00
Sept.	3.	Alfred Williams & Co., books.....	2.50
		James E. Thiem, supplies.....	1.50
	30.	Mary Robinson, salary.....	100.00
Oct.	13.	T. Peyton Brown, salary.....	50.00
	14.	Macy & Lawler, lettering door.....	1.75
		W. G. Briggs, Postmaster, postage.....	12.00
	31.	Mary Robinson, salary.....	100.00
Nov.	3.	James E. Thiem, ledger.....	4.00
	14.	Mary Robinson, salary.....	50.00
	30.	Mary Robinson, salary.....	50.00

## 1914.

## RECEIPTS.

Jan.	31.	Executive Department, appropriation.....	400.00
Feb.	28.	Executive Department, appropriation and refund.....	261.40
Apr.	30.	Refund on traveling expenses advanced.....	2.85
June	27.	Executive Department, appropriation.....	100.00
Aug.	31.	Executive Department, appropriation.....	250.00
Sept.	9.	Executive Department, appropriation.....	250.00
Nov.	27.	Executive Department, appropriation.....	93.01

*Bureau of County Health.*

1913.

## DISBURSEMENTS.

Dec.	22.	Frances Wilson, salary.....	\$ 60.00
		P. W. Covington, salary.....	208.33
		Southern Express Co., express.....	5.50
		Western Union Telegraph Co., telegrams.....	2.52
		F. A. Hardy, test cards.....	4.70
		P. W. Covington, express.....	1.20
1914.			
Jan.	1.	P. W. Covington, traveling expenses.....	77.34
	6.	Remington Typewriter Co., supplies.....	.75
		W. G. Briggs, Postmaster, postage.....	5.00
		Western Union Telegraph Co., telegram.....	.29
	12.	W. G. Briggs, Postmaster, postage.....	5.00
	21.	W. G. Briggs, Postmaster, postage.....	5.00
	27.	W. G. Briggs, Postmaster, postage.....	5.00
Feb.	16.	Frances Wilson, salary.....	60.00
		P. W. Covington, salary.....	208.33
		W. G. Briggs, Postmaster, postage.....	12.00
		Southern Bell Telephone & Telegraph Co., telephone..	1.45
		MacIntosh Ster. Company, slides.....	2.50
		The C. F. Pease Co., charts.....	25.00
		P. W. Covington, traveling expenses.....	52.65
		P. W. Covington, salary.....	84.00
	27.	P. W. Covington, traveling expenses.....	47.32
		Frances Wilson, salary.....	60.00
Mar.	11.	W. G. Briggs, Postmaster, postage.....	5.00
		Swindell-Barnes Co., rubber stamps.....	.45
	14.	Macy & Lawler, chart.....	4.00
	16.	Chicago Medical Book Co., books.....	1.00
	19.	W. G. Briggs, Postmaster, postage.....	5.00
	31.	P. W. Covington, salary.....	208.33
		Frances Wilson, salary.....	60.00
		W. G. Briggs, Postmaster, postage.....	5.00
		P. W. Covington, traveling expenses.....	73.04
	10.	Southern Express Co., express.....	3.95
Apr.	1.	R. I. Poole, map.....	1.35
		Southern Bell Telephone and Telegraph Co., telephone..	1.45
		Southern Express Co., express.....	.25
May	9.	Bureau of Engineering & Education, multigraphing....	10.90
		Frances Wilson, salary.....	22.00
	8.	P. W. Covington, traveling expenses.....	105.55
	20.	W. G. Briggs, Postmaster, postage.....	5.00
June	8.	Western Union Telegraph Co., telegram.....	.40
		Carroll Adv. & Letterwriting Co., stenographic service..	1.50
	9.	Southern Express Co., express.....	2.07
		Frances Wilson, salary.....	22.00
		P. W. Covington, traveling expenses.....	60.49
		Remington Typewriter Co., supplies.....	.75

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June 11.	W. G. Briggs, Postmaster, postage.....	\$ 5.00
30.	Frances Wilson, salary.....	60.00
July 1.	P. W. Covington, traveling expenses.....	49.85
2.	Alfred Williams & Co., supplies.....	2.85
3.	P. W. Covington, salary.....	20.85

## RECEIPTS.

Jan. 31.	Checks P. W. C., \$1.75; Executive Department, \$500....	501.75
Feb. 28.	Checks Executive Department.....	400.00
Mar. 31.	Vital Statistics for Post. Advanced.....	2.44
Apr. 30.	Vital Statistics for Post. Advanced.....	1.88
June 27.	Executive Department .....	750.00

*State Laboratory of Hygiene.*

1912.

## DISBURSEMENTS.

Dec. 4.	Southern Express Co., express.....	\$ 40.92
	Carolina Power & Light Co., lights.....	14.91
	Johnson & Johnson, fuel.....	11.88
	J. Schwartz, laboratory supplies.....	30.00
6.	Postal Cable & Telegraph Co., telegraphic service.....	2.10
11.	Excelsior Steam Laundry, laundry.....	4.50
	S. J. Adams, Pasteur treatment expense.....	8.15
	Southern Bell Telephone & Telegraph Co., telephone.....	4.00
	J. C. Brantley, chemicals and laboratory supplies.....	3.40
	J. R. Ferrall & Co., supplies.....	5.00
	Thos H. Briggs & Sons, supplies.....	1.40
14.	C. A. Shore, salary.....	250.00
	C. A. Shore, cash advanced.....	2.46
	Arthur McKimmon, salary.....	60.00
	F. W. Temple, salary.....	60.00
	Daisy B. Allen, salary.....	100.00
	J. W. Kellogg, salary.....	150.00
	Fred Morgan, salary.....	10.00
18.	N. W. Wallace, Sheriff, commission.....	1.60
31.	Edward Hughes, freight and drayage.....	3.39

1913.

Jan. 2.	Fred Morgan, salary.....	10.00
	Lurena Holloway, salary.....	5.80
	W. G. Briggs, Postmaster, postage.....	20.00
9.	Carolina Power & Light Co., lights.....	14.23
10.	Underhill & Fleming, repairs.....	6.40
13.	Southern Express Co., express.....	31.45
15.	Fred Morgan, salary.....	10.00
18.	C. A. Shore, cash advanced.....	3.00
	S. J. Adams, Pasteur treatment expense.....	10.15
	Southern Bell Telephone & Telegraph Co., telephone....	4.75
	W. B. Mann & Co., laboratory supplies.....	1.00
	Eimer & Amend, chemicals and laboratory supplies.....	1.35
	Postal Telegraph-Cable Co., telephone.....	4.40
	Powell & Powell, fuel.....	5.80
	Office Stationery Co., supplies.....	1.00
	Johnson & Johnson Co., ice.....	2.00
	American Cork Co., chemicals and laboratory supplies..	1.15
	Buffalo Box Factory, chemicals and laboratory supplies.	13.96
	R. L. Polk & Co., books.....	6.00
	J. R. Ferrall & Co., Pasteur treatment expense.....	4.30
	C. A. Shore, cash advanced.....	5.00
	Joe Martin, Pasteur treatment expense.....	3.00
21.	W. G. Briggs, Postmaster, postage.....	64.08
27.	S. R. Cowan, Sheriff, commission.....	.80

Jan.	31.	C. A. Shore, salary.....	\$ 250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	100.00
		Arthur McKimmon, salary .....	60.00
		F. W. Temple, salary.....	60.00
		Fred Morgan, salary .....	10.00
		Lurena Holloway, salary.....	7.20
		D. Appleton & Co., books.....	44.65
		Rockefeller Ins. Med. Research, books.....	5.00
		Cincinnati Bottlers' Supply Co., chem. and lab. sup.....	1.68
		Journal of Infectious Diseases, books.....	5.00
		Arthur H. Thomas Co. chemicals and laboratory supplies	3.83
Feb.	7.	Underhill & Fleming, repairs.....	1.00
		Carolina Power & Light Co., lights.....	9.28
		Southern Bell Telephone & Telegraph Co., telephone....	4.75
		J. R. Ferrall & Co., Pasteur treatment expense.....	5.75
		J. C. Brantley, chemical and laboratory supplies.....	1.80
		Johnson & Johnson Co., fuel.....	12.00
		S. J. Adams, Pasteur treatment expense.....	3.89
		Western Union Telegraph Co., telegrams.....	1.45
		Postal Telegraph-Cable Co., telegrams.....	3.26
		Engineering News, books.....	5.00
		W. H. King Drug Co., chemicals and laboratory supplies	9.73
		Southern Express Co., express.....	34.86
		Excelsior Steam Laundry, laundry.....	9.00
		Alfred Williams & Co., office supplies.....	4.00
	15.	Fred Morgan, salary.....	10.00
	18.	Mill Creek Distilling Co., chemicals and laboratory sup..	28.90
		American Public Health Association, books.....	5.00
		N. Wheeling Glass Co., chemicals and laboratory sup..	6.72
	28.	C. A. Shore, cash advanced.....	4.65
		C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	100.00
		F. W. Temple, salary.....	60.00
		Arthur McKimmon, salary.....	60.00
		Fred Morgan, salary.....	10.00
		Lorena Holloway, salary.....	5.60
		W. H. King Drug Co., chemicals and laboratory sup....	26.63
Mar.	7.	Southern Express Co., express.....	32.43
		Powell & Powell, fuel.....	12.90
		J. C. Brantley, chemicals and laboratory supplies.....	1.10
		J. R. Ferrall & Co., Pasteur treatment expense.....	1.61
		Dobbin-Ferrall Co., supplies.....	13.63
		American Cork Co., chemicals and laboratory supplies...	5.00
		Johnson & Johnson Co., ice.....	2.00
		Carolina Power & Light Co., lights.....	12.03
		Raleigh Adv. & Letterwriting Co., supplies.....	7.95
		Postal Telegraph-Cable Co., telegrams.....	2.90
	15.	Fred Morgan, salary.....	10.00

Mar.	18.	Southern Bell Telephone & Telegraph Co., telephone.....\$	5.40
		G. H. Dortch & Bro. Co., insurance.....	22.00
	26.	Mrs. F. A. Woodard, rent.....	80.00
	31.	C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	100.00
		Arthur McKimmon, salary.....	75.00
		F. W. Temple, salary.....	75.00
		Fred Morgan, salary.....	10.00
		Lurena Holloway, salary.....	7.30
		W. G. Briggs, Postmaster, postage.....	22.00
Apr.	4.	W. B. Mann & Co., supplies.....	2.00
	8.	Carolina Power & Light Co., lights.....	11.32
	12.	Southern Express Co., express.....	33.95
		James I. Johnson, chemicals and laboratory supplies....	.85
		Southern Bell Telephone & Telegraph Co., telephone.....	5.80
		J. R. Ferrall & Co., Pasteur treatment expense.....	4.41
		J. C. Brantley, chemicals and laboratory supplies.....	1.60
		Alderman Toy Co., supplies.....	3.00
		Office Stationery Co., office supplies.....	.75
		Powell & Powell, ice.....	2.90
		Johnson & Johnson, fuel.....	14.00
		Arthur H. Thomas Co., chemicals and laboratory sup....	7.76
		S. J. Adams, Pasteur treatment expense.....	13.38
	15.	Fred Morgan, salary.....	10.00
		P. Blakiston's Sons Co., books.....	10.00
		Postal Telegraph-Cable Co., telegrams.....	3.20
		Southern Railway Co., freight.....	2.06
		Arthur H. Thomas Co., chemicals and laboratory sup....	1.25
		J. B. Lippincott Co., books.....	8.00
		American Medical Association, books.....	5.00
	30.	C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	100.00
		Arthur McKimmon, salary .....	75.00
		F. W. Temple, salary.....	75.00
		Fred Morgan, salary.....	10.00
		Lorena Holloway, salary.....	6.40
May	1.	Excelsior Steam Laundry, laundry.....	9.00
	2.	Mrs. F. A. Woodard, rent.....	20.00
	6.	Postal Telegraph & Cable Co., telegrams.....	2.80
		C. A. Shore, cash advanced.....	2.50
	8.	Southern Express Co., express.....	29.80
		C. A. Shore, telephone, freight and books.....	9.41
		Southern Bell Telephone & Telegraph Co., telephone....	7.15
		J. R. Ferrall & Co., Pasteur treatment expense.....	5.25
		J. C. Brantley, chemicals and laboratory supplies.....	1.10
		Alderman Toy and China Co., office fixtures.....	9.10
		Johnson & Johnson Co., ice.....	2.00
		Carolina Power & Light Co., lights.....	11.90
		Eimer & Amend, chemicals and laboratory supplies....	1.94

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May	8.	Antique Furniture Co., office furniture.....	\$	4.50
		S. J. Adams, Pasteur treatment expense.....		6.93
		Arthur H. Thomas Co., chemicals and laboratory sup.		56.48
	13.	Raleigh Insurance & Realty Co.....		11.00
	15.	Fred Morgan, salary.....		10.00
	26.	Eimer & Amend, chemicals and laboratory supplies.....		51.30
	29.	Dr. H. M. Alexander & Co., Pasteur treatment.....		46.00
	31.	C. A. Shore, salary.....		250.00
		C. A. Shore, freight.....		1.50
		J. W. Kellogg, salary.....		150.00
		Daisy B. Allen, salary.....		100.00
		F. W. Temple, salary.....		75.00
		Arthur McKimmon, salary.....		75.00
		Fred Morgan, salary.....		10.00
		Lorena Holloway, salary.....		6.80
		Mrs. F. A. Woodard, rent.....		20.00
		C. A. Shore, traveling expenses.....		29.50
June	2.	N. C. State Board of Health, salary adv.....		45.00
		E. B. Davis, salary.....		45.00
		Southern Express Co., express.....		29.00
June	3.	Rudolph Durham, salary.....		5.00
	6.	Johnson & Johnson Co., ice.....		4.00
		J. R. Ferrall & Co., Pasteur treatment expense.....		6.00
		S. J. Adams, Pasteur treatment expense.....		5.40
		Tucker Building Pharmacy, Pasteur treatment expense..		3.50
		Carolina Power & Light Co., lights.....		9.75
		Postal Telegraph & Cable Co., telegrams.....		3.26
		Southern Bell Telephone & Telegraph Co., telephone....		7.70
		W. B. Mann & Co., supplies.....		1.00
	5.	D. T. Moore, water.....		1.00
	9.	N. W. Wallace, sheriff's commission.....		1.60
		W. H. King Drug Co., chemicals and laboratory sup...		1.15
	10.	Thos. H. Briggs & Sons.....		1.00
	16.	Fred Morgan, wages.....		10.00
	20.	American Cork Co., chemicals and laboratory supplies..		3.13
		Cincinnati Bottlers S. Co., chemicals and laboratory sup.		1.92
		G. L. Vinson Co., repairs.....		1.50
	23.	David A. Longacre, Pasteur treatment expense.....		3.00
		Whitehall Tatum Co., chemicals and laboratory supplies		12.99
		C. A. Shore, salary.....		250.00
	30.	J. W. Kellogg, salary .....		150.00
		Daisy B. Allen, salary.....		175.00
		F. W. Temple, salary.....		75.00
		Arthur McKimmon, salary.....		75.00
		A. B. Greenwood, salary.....		37.50
		Russell Ferrell, salary.....		25.00
		Everett Smith, salary.....		25.00
		Fred Morgan, salary.....		10.00
		Lorena Holloway, salary.....		8.50
		C. A. Shore, traveling expenses.....		18.45
		C. A. Shore, cash advanced.....		3.46

## NORTH CAROLINA BOARD OF HEALTH

July	1.	J. R. Rogers, agent, freight.....	\$ 2.35
		R. L. Koonce, salary.....	34.66
	2.	Southern Express Company, express.....	40.21
	3.	Southern Bell Telephone & Telegraph Co., telegrams....	6.00
		W. G. Briggs, Postmaster, postage.....	20.00
		Farmer-Cole Plumbing Co., repairs.....	1.40
		Arthur H. Thomas Co., chemicals and laboratory sup....	.55
		Johnson & Johnson, ice.....	6.00
		Office Stationery Co., office supplies.....	2.25
		J. C. Brantley, chemicals and laboratory supplies.....	13.10
		J. R. Ferrall & Co., Pasteur treatment expense.....	3.75
		S. J. Adams, Pasteur treatment expense.....	4.46
		Carolina Power & Light Co., lights and gas.....	13.55
	8.	Mrs. F. A. Woodard, rent.....	20.00
	9.	Thos. H. Briggs & Sons, supplies.....	1.03
	14.	W. H. King Drug Co., chemicals and laboratory supplies	4.60
		American Medical Associations, books.....	5.00
		Dobbin & Ferrall Co., supplies.....	2.50
		Arthur H. Thomas Co., chemicals and laboratory sup...	1.58
		Postal Telegraph-Cable Co., telegrams.....	3.33
		Norris Bros. Co., supplies.....	2.40
	12.	Ed Hughes, drayage and freight.....	3.05
		Fred Morgan, salary.....	10.00
	17.	F. W. Woolworth Co., supplies.....	4.00
	18.	W. G. Briggs, Postmaster, postage.....	64.08
	23.	Sheriff Robeson County, commission.....	7.20
	30.	J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary.....	75.00
		Fred Morgan, salary.....	10.00
		Everett Smith, salary.....	25.00
		Russell Ferrell, salary.....	25.00
		A. B. Greenwood, salary.....	75.00
		Lorena Holloway, salary.....	10.30
	31.	Mrs. F. A. Woodard, rent.....	20.00
		F. R. Forrest, sheriff, commission.....	1.60
		R. S. Koonce, salary.....	40.00
Aug.	1.	C. A. Shore, traveling expenses.....	33.20
		C. A. Shore, salary.....	250.00
	4.	Alfred Williams & Co., office supplies.....	3.70
	5.	Southern Express Co., express.....	39.75
		Carolina Power & Light Co., lights.....	10.99
		Southern Bell Telephone & Telegraph Co., telephone....	4.00
		Johnson & Johnson, ice.....	8.00
		J. R. Ferrall & Co., Pasteur treatment expense.....	7.95
		S. J. Adams, Pasteur treatment expense.....	7.05
		Dobbin-Ferrall Co., supplies.....	3.00
		W. B. Mann & Co., supplies.....	1.00
		Western Union Telegraph Co., telegrams.....	1.75
		W. H. King Drug Co., chemicals and laboratory supplies	1.00

## FIFTEENTH BIENNIAL REPORT

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Aug.	5.	J. C. Brantley, supplies.....	\$ 8.40
		Union Paper Co., chemicals and laboratory supplies....	11.40
		Office Stationery Co., office supplies.....	1.55
		Postal Telegraph-Cable Co., telegrams.....	4.89
		Tucker Building Pharmacy, chemicals and laboratory supplies .....	12.40
	6.	W. G. Briggs, Postmaster, postage.....	20.00
	12.	Hill Directory Co., books.....	4.00
	13.	N. W. Wallace, sheriff, commission.....	.80
	14.	Ed Hughes, drayage and freight.....	1.76
	15.	Fred Morgan, salary.....	10.00
		Oak City Steam Laundry, laundry.....	9.00
	30.	Ed. C. Register.....	3.80
	20.	Jas. I. Johnson, chemicals and laboratory supplies....	.85
		Johns Hopkins Press, books.....	2.00
	29.	Russell Ferrall, salary.....	25.00
	30.	J. C. Allison,.....	5.00
	30.	P. Blakiston's Sons Co., books.....	1.50
		American Cork Co., chemicals and laboratory supplies..	2.30
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary.....	75.00
		Fred Morgan, salary.....	10.00
		Everett Smith, salary .....	25.00
		A. B. Greenwood, salary.....	75.00
		Mrs. F. A. Woodard, rent.....	20.00
		Lorena Holloway, salary.....	10.00
		C. A. Shore, cash advanced.....	21.06
		C. A. Shore, traveling expenses.....	24.70
		C. A. Shore, salary.....	250.00
		R. S. Koonce, salary.....	39.00
Sept.	1.	Southern Bell Telephone Co., telephone.....	4.70
	3.	J. R. Ferrall & Co., Pasteur treatment expense.....	8.20
		J. C. Brantley, supplies.....	9.50
		Office Stationery Co., office supplies.....	1.35
		Carolina Power & Light Co., lights.....	10.92
		Alderman Toy & China Co., supplies.....	1.30
		Johnson & Johnson Co., ice.....	8.00
		Jenness Morrill, Jr., Pasteur treatment expense.....	1.50
	3.	Southern Express Co., express.....	36.10
	6.	Ed. W. Hughes, drayage.....	1.16
	9.	W. H. King Drug Co., chemicals and laboratory sup....	4.93
		S. J. Adams, Pasteur treatment expense.....	2.70
		Arthur H. Thomas Co., chemicals and laboratory sup...	7.46
		Elmer & Amend, chemicals and laboratory supplies.....	29.09
		Broad Rock Water Co., water.....	2.00
	12.	W. G. Briggs, Postmaster, postage.....	20.00
	15.	N. W. Wallace, commission.....	.80
		Arthur H. Thomas Co., chemicals and laboratory sup-plies .....	25.69

Sept.	15.	Thos. H. Briggs & Sons, supplies.....	\$ .75
		Eimer & Amend, chemicals and laboratory supplies....	1.90
		King-Crowell Drug Co., chemicals and laboratory sup- plies .....	.70
		Postal Telegraph-Cable Co., telegrams.....	6.59
		Western Union Telegraph Co., telegrams.....	.50
		Fred Morgan, salary.....	10.00
16.		Alberta Womble,.....	2.80
23.		Everett Smith, salary.....	16.66
26.		Whithall Tatum Co., chemicals and laboratory sup- plies .....	12.92
		Edward S. Schmid, salary.....	2.25
		Eimer & Amend, office furniture.....	125.00
		W. G. Briggs, P. M., box rent.....	2.00
		J. W. Kellogg, salary.....	150.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary.....	75.00
		Fred Morgan, salary.....	10.00
		Lorena Holloway, salary.....	10.00
		A. B. Greenwood, salary.....	20.00
		Everett Smith, salary.....	10.00
		C. A. Shore, salary.....	250.00
		C. A. Shore, freight and drayage.....	5.29
		Mrs. F. A. Woodward, rent.....	20.00
		Daisy B. Allen, salary.....	125.00
		C. A. Shore, traveling expenses.....	124.25
27.		Daisy B. Allen, cash advanced.....	4.00
Oct.	6.	Jenness Morrill, Jr., Pasteur treatment expense.....	1.50
	8.	Southern Express Co., express.....	30.43
		Carolina Power & Light Co., lights.....	9.01
		Royall & Borden Furniture Co., furniture.....	10.00
		Hunter-Rand Co., supplies.....	1.20
		Johnson & Johnson Co., ice.....	4.00
		Office Stationery Co., office supplies.....	.75
		Baker-Thompson Lumber Co., office fixtures.....	15.00
		C. A. Shore, cash advanced.....	11.60
		Sophie D. Busbee, salary.....	11.50
		J. C. Brantley, water.....	3.40
		S. J. Adams, Pasteur treatment expense.....	7.09
		Southern Bell Telephone & Telegraph Co., telephone....	4.00
		W. B. Mann & Co.....	1.00
13.		Farmer-Cole Plumbing Co.....	8.25
		J. R. Ferrall & Co., Pasteur treatment expenses.....	5.58
		D. T. Moore, local agent, water.....	1.00
		Thos H. Briggs & Sons., supplies.....	1.00
15.		Fred Morgan, salary.....	10.00
27.		N. Wheeling Glass Co., chemicals and laboratory sup- plies .....	6.72
		David L. Longacre, Pasteur treatment expense.....	6.00
		Postal Telegraph-Cable Co., telegrams.....	1.89
		Whitall Tatum Co., chemicals and laboratory supplies	14.70

Oct.	27.	Angelica Jacket Co., supplies.....	\$	7.50
		R. H. Merritt.....		1.50
31.		Daisy B. Allen, salary.....		125.00
		J. W. Kellogg, salary.....		150.00
		Arthur McKimmon, salary.....		75.00
		F. W. Temple, salary.....		75.00
		W. C. Riddick, salary.....		60.00
		Fred Morgan, salary.....		10.00
		Lorena Holloway, salary.....		10.00
		R. D. Bain, commission.....		.80
		C. A. Shore, salary.....		250.00
Nov.	1.	Perry Art Store, office supplies.....		8.00
		W. G. Briggs, Postmaster, postage.....		64.32
		Ed. Hughes, drayage and freight.....		2.39
		Ed. Hughes, drayage and freight.....		1.00
3.		Tucker Bldg. Pharmacy, supplies.....		2.00
7.		R. E. Lewis, sheriff, commission.....		.80
		Mrs. F. A. Woodard, rent.....		20.00
		G. L. Vinson Co., repairs.....		2.10
		American Cork Co., chemicals and laboratory sup.....		3.14
		Underwood Typewriter Co., typewriter.....		33.03
		Raleigh Insurance & Realty Co.,.....		5.00
		Johnson & Johnson, ice.....		4.00
		J. C. Brantley, chemicals and laboratory supplies.....		1.15
		Southern Express Co., express.....		39.75
		Hunter-Rand Co., supplies.....		1.20
		Excelsior Steam Laundry, laundry.....		9.00
		J. R. Ferrall & Co., Pasteur treatment expense.....		6.91
		W. B. Mann Co., supplies.....		1.00
8.		Carolina Power and Light Co., lights.....		6.62
		Ed. Hughes, drayage.....		1.80
11.		W. G. Briggs, Postmaster, postage.....		20.00
		Southern Bell Telephone & Telegraph Co., telephone..		7.00
		Eimer & Amend, chemicals and laboratory supplies....		1.19
		Arthur H. Thomas Co., chemicals and laboratory sup- plies .....		23.33
		S. J. Adams, Pasteur treatment expense.....		5.40
		J. G. Ball Co., supplies.....		2.75
		Postal Telegraph-Cable Co., telegrams.....		3.70
		W. H. King Drug Co., chemicals and laboratory supplies		43.15
15.		Fred Morgan, salary.....		10.00
18.		Ed. Hughes, drayage.....		.93
21.		Thos. H. Briggs & Sons, supplies.....		2.70
25.		Rockefeller Institute Medical Research, books.....		5.00
		W. B. Barrow, repairs.....		77.12
		Arthur H. Thomas Co., chemicals and laboratory sup..		76.48
		Arthur H. Thomas Co., chemicals and laboratory sup..		156.24
28.		N. W. Wallace, sheriff, commission.....		1.60
29.		C. A. Shore, cash advanced.....		6.08
		Daisy B. Allen, salary.....		125.00
		F. W. Temple, salary.....		75.00

Nov.	29.	Arthur McKimmon, salary.....	\$ 75.00
		W. C. Riddick, salary.....	60.00
		Fred Morgan, salary.....	10.00
		Lorena Holloway, salary.....	10.00
		Mrs. F. A. Woodard, rent.....	20.00
		C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		W. G. Briggs, Postmaster, postage.....	50.00
		Interest debited by bank.....	6.25
Dec.	8.	Tucker Building Pharmacy, supplies.....	2.20
		Carroll Adv. & Letterwriting Co., letters.....	15.25
		Raleigh Roofing & Cornice Co., stove pipe.....	3.13
		W. B. Mann & Co., matches.....	1.00
		Carolina Power & Light Co., lights and gas.....	6.68
		Johnson & Johnson, ice.....	2.00
		Powell & Powell, fuel.....	12.90
		D. T. Moore, agent, water.....	1.00
		Southern Express Co., express.....	35.40
		S. J. Adams, supplies.....	6.89
		Thos. H. Briggs & Sons, supplies.....	5.45
		W. B. Saunders & Co., 1 book Eyre.....	3.00
		James I. Johnson.....	1.00
		J. R. Ferrall & Co.....	7.80
	12.	G. Schwartz, blood and bile.....	40.00
	15.	Fred Morgan, wages.....	10.00
	17.	Southern Bell Telephone & Telegraph Co., telephone....	6.20
		Eimer & Amend, 1 burette.....	4.80
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary.....	75.00
		W. C. Riddick, salary.....	75.00
		C. A. Shore, salary.....	250.00
	20.	Clarence Bailey, 6 rabbits.....	3.00
		E. Hughes, freight and drayage.....	1.04
	31.	Fred Morgan, wages.....	10.00
		Lorena Holloway, wages.....	10.00
 1914.			
Jan.	5.	Alfred Williams & Co., office supplies.....	4.10
		Lea & Febiger, books.....	12.00
		Postal Telegraph-Cable Co., telegrams.....	3.75
		S. J. Adams, wheat.....	5.40
		Southern Bell Telephone & Telegraph Co., telephone....	5.60
		Carolina Power & Light Co., lights.....	5.13
		Johnson & Johnson, ice.....	2.00
		Southern Express Co., express.....	38.45
		Union Paper Co., cases.....	4.50
		Engineering News, subscription.....	5.00
		Rockefeller Institute for Medical Research, subscription	5.00
		American Public Health Association, subscription and dues .....	5.00

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Jan.	5.	W. H. King Drug Co., supplies.....	\$ 1.20
		C. A. Shore, cash advanced.....	5.62
		Mrs. F. A. Woodard, rent.....	20.00
		Arthur McKimmon, expenses.....	21.20
14.	Jenness Morrill, Jr., 12 rabbits.....	6.00	
15.	Hunter-Rand Co., cotton.....	2.40	
	J. R. Ferrall & Co., Pasteur treatment expense.....	2.70	
	Johnson Sorrell, wood.....	2.50	
	Fred Morgan, wages.....	10.00	
14.	Ed Hughes, freight and drayage.....	1.30	
28.	R. E. Lewis, sheriff, commission.....	4.00	
15.	Whitall Tatum Co., sputum jars.....	21.94	
30.	J. B. Lippincott, books.....	3.00	
	Arthur H. Thomas Co., rubber tubing.....	2.48	
	Edwards & Broughton Co., boxes.....	280.00	
	Cincinnati Bottlers Supply Company, tape, postage and insurance .....	1.76	
	The Journal of Infectious Diseases, subscription.....	5.00	
	J. W. Kellogg, salary.....	150.00	
	Daisy B. Allen, salary.....	125.00	
	C. A. Shore, salary.....	250.00	
	F. W. Temple, salary.....	75.00	
	Arthur McKimmon, salary.....	75.00	
	W. C. Riddick, salary.....	75.00	
	Fred Morgan, wages.....	10.00	
	Lorena Holloway, wages.....	10.00	
31.	Ed. Hughes, drayage.....	3.32	
	Check returned unpaid.....	5.00	
Feb.	5.	Southern Express Co., express.....	37.10
	Oak City Steam Laundry, laundry.....	9.00	
	Perry's Art Store, shade.....	1.00	
	Tucker Bldg. Pharmacy, thermometer.....	1.50	
	Johnson & Johnson, ice.....	2.00	
	Southern Bell Telephone & Telegraph Co., telephone....	5.30	
6.	Carolina Power & Light Co., lights.....	4.78	
5.	J. W. Burkhead, sheriff, commission on water tax.....	.80	
	W. D. McLaurin, commission on water tax.....	1.00	
	T. B. Moseley, agent, rent.....	30.00	
	David A. Longacre (guinea pigs and white mice).....	4.20	
	Dr. C. A. Shore, cash advanced.....	2.85	
4.	Ed. Hughes, freight and drayage.....	4.17	
5.	Buffalo Box Factory.....	18.96	
	Dobbin-Ferrall Co., office furniture and supplies.....	10.20	
	Arthur H. Thomas Co., laboratory supplies.....	35.19	
7.	R. E. Lewis, sheriff, commission on tax.....	1.60	
9.	S. A. DeHart, sheriff, commission.....	8.00	
	R. D. Bain, sheriff, commissson on tax.....	.80	
10.	R. E. Lewis, sheriff, commission on tax.....	1.85	
11.	Ed. Hughes, freight and drayage.....	2.76	
14.	J. E. Triplett, commission on tax.....	.80	

Feb.	16.	C. A. Shore, cash advanced.....	\$ 3.65
		Fred Morgan, wages.....	10.00
		W. H. King Drug Co., supplies.....	.83
		Mill Creek Distilling Co., alcohol.....	27.28
		Thos. H. Briggs & Co., supplies.....	3.10
		S. J. Adams, wheat and hay.....	7.36
		Postal Telegraph-Cable Co., telegrams.....	1.30
		J. R. Ferrall & Co., Pasteur treatment expense.....	10.37
28.		C. A. Shore, cash advanced.....	3.34
		C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary.....	75.00
		W. C. Riddick, salary.....	75.00
		Fred Morgan, wages.....	10.00
		Lorena Holloway, wages.....	10.00
		Arthur H. Thomas Co., laboratory supplies.....	22.79
		F. W. Woolworth Co., supplies.....	9.15
Mar.	9.	Southern Express Company, express.....	30.14
		Carolina Power & Light Co., lights.....	7.78
		The Johns Hopkins Press, subscription.....	2.00
		Tucker Building Pharmacy, formaldehyde.....	15.00
		Southern Bell Telephone & Telegraph Co., telegrams....	4.65
11.		T. B. Moseley, rent.....	30.00
13.		Johnson & Johnson, ice.....	2.00
		J. G. Ball & Co., paper.....	1.65
		Western-Union Telegraph Co., telegrams.....	.82
11.		S. J. Adams, wheat.....	5.40
13.		Powell & Powell, fuel.....	30.00
		J. R. Ferrall & Co., Pasteur treatment expense.....	9.10
		Postal Telegraph-Cable Co., telegrams.....	1.20
		Thos. H. Briggs & Sons, supplies.....	2.95
		Tragle Cordage Co., twine.....	2.63
16.		Fred Morgan, wages.....	10.00
19.		Arthur H. Thomas Co., sterilizer and control valve and ampules .....	411.96
30.		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary.....	75.00
		W. C. Riddick, salary.....	75.00
		Fred Morgan, salary.....	10.00
		Lorena Holloway, wages.....	10.00
		C. A. Shore, salary.....	250.00
		C. A. Shore, cash advanced.....	6.02
		T. B. Moseley, rent.....	30.00
Apr.	6.	Southern Express Co., express .....	35.12
		David A. Longacre, mice.....	1.20
		American Public Health Association, dues and subscription .....	5.00

Apr.	6.	Western Union Telegraph Co., telegrams.....	\$	1.25
		W. G. Briggs, Postmaster, postage.....		20.00
		J. R. Ferrall & Co., Pasteur treatment expense.....		9.25
		Alfred Williams & Co., supplies.....		3.30
		S. J. Adams, wheat.....		5.40
		Southern Bell Telephone & Telegraph Co., telephone..		4.00
		Carolina Power & Light Co., lights.....		9.84
		American Cork Co., corks.....		5.50
		Powell & Powell, fuel.....		10.00
		Raleigh Iron Works.....		5.07
		G. H. Dortch & Bro., premium on insurance.....		22.00
		Carroll Adv. & Letter Writing Co., circular letters....		57.70
	15.	Fred Morgan, wages.....		10.00
		W. H. King Drug Co.,.....		1.48
		H. K. Mulford Co., Litre typhoid vaccine.....		40.00
		H. M. Alexander & Co., typhoid vaccine.....		50.00
		Thos. H. Briggs & Sons, supplies.....		2.30
		Farmer-Cole Plumbing Co., repairs.....		1.50
		Raleigh Insurance & Realty Co., insurance.....		11.00
		Postal Telegraph-Cable Co., telegrams.....		6.42
	20.	W. G. Briggs, Postmaster, postage.....		64.32
	24.	H. E. Rowe, commission on water tax.....		1.90
	30.	J. G. Ball Co., soap and toilet paper.....		12.25
		T. B. Moseley, agent, rent.....		30.00
		Dr. C. A. Shore, salary.....		250.00
		J. W. Kellogg, salary.....		150.00
		Daisy B. Allen, salary.....		125.00
		F. W. Temple, salary.....		75.00
		Arthur McKimmon, salary.....		75.00
		W. C. Riddick, salary.....		75.00
		Fred Morgan, wages.....		10.00
		Lorena Holloway, wages.....		10.00
		S. A. Dehart, sheriff, commission on water tax.....		.80
May	5.	Southern Express Company, express.....		37.39
		Western-Union Telegraph Co., telegrams.....		1.33
		Alderman Toy & China Co., mop and oil.....		4.00
		Raleigh Iron Works, repair on autoclave.....		4.30
		Johnson & Johnson, ice.....		4.00
		Southern Bell Telephone & Telegraph Co., telephone...		5.80
		Whitall Tatum Co., sputum jars.....		10.97
		Carolina Power & Light Company, lights.....		3.90
		C. A. Shore, advanced cash.....		1.23
		J. C. Brantley, water.....		4.40
		J. R. Ferrall & Co., Pasteur treatment expense.....		6.41
	15.	McKimmon & Thomas, insurance.....		11.00
		Southern Express Co., express.....		1.05
		American Medical Association, medical directory.....		7.00
		Thos. H. Briggs & Sons, supplies.....		2.00
		Eimer & Amend, supplies.....		42.58
		Oak City Steam Laundry Co., laundry.....		9.00
		Alfred Williams & Co., cards.....		1.00

May	15.	S. J. Adams, hay and wheat.....	\$	6.89
		Fred Morgan, wages.....		10.00
		C. A. Shore, cash advanced.....		10.98
	23.	W. G. Briggs, Postmaster, postage.....		20.00
	6.	Debit bank, check returned unpaid.....		5.00
	26.	Jacob Merritt, freight and drayage.....		.89
	27.	C. A. Shore, salary.....		250.00
	29.	Ed Hughes, freight and drayage.....		3.40
	30.	J. W. Kellogg, salary.....		150.00
		Daisy B. Allen, salary.....		125.00
		F. W. Temple, salary.....		75.00
		Arthur McKimmon, salary.....		75.00
		W. C. Riddick, salary.....		75.00
		Fred Morgan, salary.....		10.00
		E. L. Smith, salary.....		36.13
		Harriet Jones, labor.....		9.50
June	4.	Will Autry, painting and calcimining walls.....		110.00
	6.	Southern Bell Telephone & Telegraph Co., telephone.....		4.00
		Wm. Walker Jones, repairs on generator.....		2.31
		Carolina Power & Light Co., lights.....		6.58
	13.	Southern Express Co., express.....		35.58
		J. G. Ball & Co., 1 roll paper.....		1.60
		Western Union Telegraph Co., telegrams.....		1.65
		Eimer & Amend, laboratory supplies.....		11.81
		Union Paper Co., discs.....		7.50
		Whitall Tatum Co., oils.....		19.48
		David A. Longacre, white mice.....		1.20
		Johnson & Johnson, ice tickets.....		2.00
		James E. Thiem, carbon and ribbon.....		2.75
		E. H. Sargent & Co., laboratory supplies.....		7.80
		J. C. Brantley, water.....		1.10
		S. J. Adams, hay and wheat.....		6.95
		J. R. Ferrall & Co., Pasteur treatment expense.....		11.10
		Alderman Toy & China Co., 1 mop.....		.75
		M. R. Powers, 1 dozen guinea pigs.....		7.20
		Southern Manufacturing Co., screen windows.....		20.00
		Lumsden Bros., repairs.....		2.50
		Thos H. Briggs & Sons, supplies.....		.60
		Postal Telegraph-Cable Co., telegrams.....		9.42
		T. B. Moseley, agent, rent.....		30.00
	15.	W. G. Briggs, Postmaster, postage.....		20.00
		Fred Morgan, salary.....		10.00
	26.	Cox and Cox, legal fees.....		5.00
		American Medical Association, reprints with cover and envelopes .....		14.75
		W. H. King Drug Co., chemicals and laboratory supplies		5.24
		Broad Rock Mineral Springs Co., water.....		5.00
		Tucker Building Pharmacy, supplies.....		46.35
	30.	C. A. Shore, salary.....		250.00
		F. W. Kellogg, salary.....		150.00
		Daisy B. Allen, salary.....		125.00

June	30.	F. W. Temple, salary.....	\$ 75.00
		Arthur McKimmon, salary.....	75.00
		W. C. Riddick, salary.....	75.00
		A. B. Greenwood, salary.....	75.00
		E. L. Smith, salary.....	50.00
		Fred Morgan, wages.....	10.00
		Harriet Jones, wages.....	10.00
		T. B. Moseley, agent, rent.....	30.00
		H. M. Rowe, sheriff, commission.....	1.90
		H. M. Alexander & Co., typhoid vaccine.....	100.00
		Edwards & Broughton Co., small boxes.....	452.25
		C. A. Shore, cash advanced.....	5.17
July	3.	W. G. Briggs, Postmaster, postage.....	50.00
	6.	Johnson & Johnson Co., ice.....	8.00
		Dr. H. M. Alexander & Co., typhoid vaccine.....	100.00
		The Western Union Telegraph Co., telegrams .....	2.32
		Postal Telegraph Cable Co., telegrams.....	2.85
		J. R. Ferrall & Co., Pasteur treatment expense.....	9.85
		J. C. Brantley, water.....	5.25
		Dobbin-Ferrall Co., wadding.....	4.00
		Hunter-Rand Co., cotton.....	2.40
		Southern Bell Telephone & Telegraph Co., telegrams....	4.00
		Farmer-Cole Plumbing Co., repairs.....	2.75
	9.	W. G. Briggs, Postmaster, balance on box rent.....	1.00
		W. G. Briggs, Postmaster, postage.....	64.08
	15.	A. B. Greenwood, salary.....	37.50
		Fred Morgan, wages.....	10.00
		Southern Express Co., express.....	38.68
		Thos. H. Briggs & Sons, supplies.....	6.45
		S. J. Adams, wheat.....	2.70
		Arthur H. Thomas Co., laboratory supplies.....	18.00
		Eimer & Amend, supplies.....	4.81
		Carolina Power & Light Co., lights.....	16.07
	23.	Misses Duncan & Wright, letters.....	4.25
	30.	J. G. Ball & Co., 2 rolls paper.....	3.19
		American Cork Co., corks.....	5.50
		Eimer & Amend, flasks.....	40.96
		Arthur H. Thomas Co., ampules.....	97.92
		David A. Longacre, mice and guinea pigs.....	8.40
		C. A. Shore, cash advanced.....	15.24
		C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary.....	75.00
		W. C. Riddick, salary.....	75.00
		Everett Smith, salary.....	50.00
		John W. Harris, salary.....	75.00
	31.	Kenneth Smith, wages.....	11.00
		Harriet Jones, wages.....	10.00
		Fred Morgan salary.....	10.00

July	31.	W. G. Briggs, Postmaster, postage.....	\$ 50.00
Aug.	5.	Carolina Power & Light Co., lights.....	19.50
		Southern Bell Telephone & Telegraph Co., telephone....	4.30
		Johnson & Johnson Co., ice.....	8.00
		Farmer-Cole Plumbing Co., repairs.....	4.15
		T. B. Moseley, rent.....	30.00
		Hunter-Rand Co., towels.....	3.30
		Postal Telegraph-Cable Co., telegrams.....	4.83
		Arthur H. Thomas Co., slides and colored glasses.....	13.95
		S. J. Adams, hay and wheat.....	6.89
		J. R. Ferrall Co., Pasteur treatment expense.....	2.50
		Thos. H. Briggs & Sons, supplies.....	4.75
		J. C. Brantley, water .....	1.10
		N. W. Wallace, sheriff, commission.....	3.20
		R. E. Lewis, sheriff, commissions.....	1.60
		Tucker Building Pharmacy, supplies.....	6.50
		Oak City Steam Laundry, laundry.....	9.00
11.		Weathers Furniture Co., stools and table.....	5.63
14.		Southern Express Co., express.....	43.70
		W. H. King Drug Co.....	6.90
		J. C. Allison & Co., bond.....	5.00
		Western Union Telegraph Co., telegrams.....	5.42
		James E. Thiem, supplies.....	.65
		Arthur H. Thomas Co., flasks.....	6.70
		W. G. Briggs, Postmaster, postage.....	50.00
15.		Fred Morgan, wages.....	10.00
15.		N. Wheeling Glass Co., one-half gallon packers.....	6.72
		Louise Wright, salary.....	12.00
29.		Ruth Campbell, salary.....	15.00
		Dee Duncan, salary.....	6.00
		Webb & Skinner, premium on bond.....	5.00
		R. L. Polk & Co., medical directory.....	6.00
		American Medical Association, books.....	2.00
		J. G. Ball Co., matches.....	2.75
		Eimer & Amend, laboratory supplies.....	18.91
		C. A. Shore, traveling expenses.....	33.80
		C. A. Shore, cash advanced.....	6.91
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
31.		Arthur McKimmon, salary.....	75.00
		Fred Morgan, wages.....	10.00
		Harriet Jones, wages.....	10.00
		C. A. Shore, salary.....	250.00
		W. C. Riddick, salary.....	75.00
		Everett Smith, salary.....	60.00
		Willis Holding, salary.....	9.62
		John W. Harris, salary.....	50.81
		Carver Smith, salary.....	50.00
		T. B. Moseley, rent.....	30.00
29.		Ed Hughes, freight and drayage.....	3.33

Sept.	8.	Southern Express Co., express.....	\$ 22.12
	9.	Carolina Power & Light Co., lights.....	20.35
	10.	Farmer-Cole Plumbing Co., repairs.....	.60
		James E. Thiem, 1 ribbon.....	.75
		Hunter-Rand Co., roll cotton.....	1.60
		Raleigh Roofing & Cornice Co., repairs.....	.80
		Western Union Telegraph Co., telegrams.....	3.22
		Tucker Building Pharmacy, supplies.....	6.50
		Johnson & Johnson Co., ice tickets.....	6.00
		S. J. Adams, hay and scratch feed.....	6.89
		Southern Bell Telephone & Telegraph Co., telephone....	5.55
		J. R. Ferrall & Co., Pasteur treatment expense.....	6.80
		Postal Telegraph-Cable Co., telegrams.....	3.35
		W. B. Mann & Co., Bon Ami.....	1.00
		Cincinnati Bottler's Supply Co., tape.....	1.35
		W. H. King Drug Co., laboratory supplies.....	28.83
15.		Everett Smith, salary.....	30.00
		Kenneth Smith, wages.....	4.00
		Rudolph Durham, wages.....	10.00
		Arthur H. Thomas Co., laboratory supplies.....	318.08
		M. Ray Powers, guinea pigs.....	19.25
23.		W. G. Briggs, Postmaster, rent of box.....	3.00
30.		C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		F. W. Temple, salary.....	75.00
		Arthur McKimmon, salary .....	75.00
		W. C. Riddick, salary.....	75.00
		John W. Harris, salary.....	75.00
		Willis Holding, salary.....	50.00
		Carver Smith, salary.....	50.00
		Rudolph Durham, wages.....	10.00
		Ruth Townes, wages.....	10.00
		T. B. Moseley, agent, rent.....	30.00
		Daisy B. Allen, traveling expenses.....	6.20
		C. A. Shore, traveling expenses.....	55.60
		C. A. Shore, freight and drayage.....	11.69
		W. G. Briggs, Postmaster, postage.....	50.00
Oct.	5.	Southern Express Co., express.....	26.79
		Hunter-Rand Co., cotton.....	2.40
		D. Appleton & Co., books.....	34.78
		J. C. Brantley, water.....	1.95
		Johnson & Johnson, ice tickets.....	4.00
		Arthur H. Thomas Co., ampules.....	814.16
		Oak City Steam Laundry, laundry.....	9.00
		Weathers Furniture Co., desks and chairs.....	69.60
		Cross & Linehan Co., aprons.....	2.25
		Western Union Telegraph Co., telegram.....	.95
		J. G. Ball & Co., laboratory supplies.....	3.30
		Southern Telephone & Telegraph Co., telephone.....	4.40
		James E. Thiem, waste basket.....	.60

Oct.	9.	Carolina Power & Light Co., lights.....\$	20.40
		S. J. Adams, scratch feed and hay.....	3.92
		Postal Telegraph & Cable Co., telegrams.....	2.20
		Thos. H. Briggs & Sons, supplies.....	7.01
		Alfred Williams Co., supplies.....	8.35
		W. G. Briggs, Postmaster, postage.....	64.08
	12.	Jesse M. Howard, three g. pigs.....	1.50
	15.	Buffalo Box Factory, boxes.....	12.40
		Millcreek Distilling Co., alcohol.....	27.58
		J. R. Ferrall & Co., Pasteur treatment and supplies.....	8.32
		Rudolph Durham, wages.....	10.00
		C. A. Shore, cash advanced.....	7.56
	20.	Seaboard Air Line Railway, freight.....	4.44
		Otis Lanier, drayage.....	1.25
	29.	Ed. Hughes, freight and drayage.....	3.65
	31.	C. A. Shore, salary.....	250.00
		J. W. Kellogg, salary.....	150.00
		Daisy B. Allen, salary.....	125.00
		Arthur McKimmon, salary.....	75.00
		F. W. Temple, salary.....	75.00
		W. C. Riddick, salary.....	75.00
		Carver Smith, salary .....	50.00
		Willis Holding, salary .....	37.50
		Rudolph Durham, wages .....	10.00
		Ruth Townes, wages .....	10.00
		T. B. Moseley, agent, rent.....	30.00
		Seaboard Air Line Railway, freight.....	9.49
		Southern Railway Co., freight.....	2.15
		Arthur H. Thomas Co., ampules.....	894.48
		Union Paper Co., mailing cases.....	9.35
		Whitall Tatum Co., bottles.....	19.48
Nov.	2.	Southern Express Co., express.....	22.22
		Southern Telephone & Telegraph Co., telephone.....	4.00
		Johnson & Johnson, ice tickets.....	4.00
		Carolina Power & Light Co., lights.....	20.41
	9.	Joe Harris, freight and drayage.....	1.99
	18.	W. G. Briggs, Postmaster; postage.....	50.00
		W. H. King Drug Co., laboratory supplies.....	14.45
		Edwards & Broughton, boxes.....	55.00
		Improved Mailing Case Co., mailing cases.....	45.59
		Arthur H. Thomas Co., laboratory supplies.....	126.00
		Oak City Steam Laundry, laundry.....	9.00
		James E. Thiem, supplies.....	.75
		S. J. Adams, hay and scratch feed.....	6.49
		Thos. H. Briggs & Sons, supplies.....	3.17
		American Medical Association, subscription.....	1.25
		American Cork Co., corks.....	5.75
		Tucker Building Pharmacy, laboratory supplies.....	11.00
		J. R. Ferrall & Co., Pasteur treatment.....	5.68
		Farmer-Cole Plumbing Co., repairs.....	2.20
		Postal Telegraph & Cable Co., telegrams.....	1.73

Nov. 19.	Rudolph Durham, wages.....	\$ 10.00
	Willis Holding, salary.....	45.00
25.	T. B. Moseley, four guinea pigs.....	2.00
26.	Southern Railway Co., freight.....	20.20
30.	C. A. Shore, cash advanced.....	10.15
	C. A. Shore, salary.....	250.00
	J. W. Kellogg, salary.....	150.00
	Daisy B. Allen, salary.....	75.00
	Arthur McKimmon, salary.....	75.00
	F. W. Temple, salary.....	75.00
	W. C. Riddick, salary.....	75.00
	Carver Smith, salary .....	50.00
	Rudolph Durham, wages .....	10.00
	Ruth Townes, wages.....	10.00
	N. Wheeling Glass Co., packers.....	63.84
	Eimer & Amend, platinum wire.....	25.38
	Arthur H. Thomas Co., cover glasses and slides.....	32.18
	Logan Knuckles, freight and drayage.....	.98
	Southern Express Co., express.....	54.90
	T. B. Moseley, Agent, rent.....	30.00
	Journal of Infectious Diseases, subscription.....	5.10
	Eimer & Amend, test tubes.....	5.51

## 1912.

## RECEIPTS.

Dec. 1.	Balance .....	\$ 623.86
2.	Asheville, Buckeye and Biltmore, water taxes.....	46.30
	T. M. Jordan, laboratory fees.....	1.00
	Joseph Pemberton, Pasteur treatment.....	20.00
3.	Greensboro and High Point, water taxes.....	39.90
	Lenoir, water taxes.....	22.33
9.	Hugh Folger, Pasteur treatment.....	20.00
11.	Lexington and Thomasville, water taxes .....	30.40
	Greenville, water taxes.....	16.00
13.	Charlotte, water taxes .....	16.00
14.	Maxton, water taxes.....	32.00
	Dr. L. D. Wharton, laboratory fees.....	2.50
	Atlantic Trust and Banking Co., laboratory fees.....	5.00
21.	J. C. Rodman, laboratory fees.....	5.00
	Russell Brasswell, Pasteur treatment.....	20.00
	E. Epstein, Pasteur treatment .....	20.00
26.	Shelby, water taxes .....	18.50
31.	Mooresville, water taxes.....	28.80

## 1913.

Jan. 1.	F. J. Varnell, Pasteur treatment.....	20.00
	J. C. Edwards, Pasteur treatment.....	20.00
6.	Newton and Hickory, water taxes.....	30.40
	J. B. Mitchell, Pasteur treatment.....	10.00
	H. F. Kinsman, laboratory fees.....	5.00
8.	Edenton, water taxes .....	15.25
	Goldsboro, water taxes.....	15.20

Jan.	8.	Oxford, water taxes.....	\$ 15.20
		Tarboro, water taxes.....	15.20
		Wadesboro, water taxes.....	15.20
		Salisbury and Spencer, water taxes.....	60.80
		Asheboro, water taxes.....	32.00
	9.	Gastonia, water taxes .....	15.20
		Wilson, water taxes.....	19.95
10.		Maxton, water taxes.....	16.00
11.		Henderson, water taxes.....	20.00
		W. D. Gilmore, laboratory fees.....	1.00
		Dunn, water taxes.....	15.60
13.		Marion, water taxes .....	15.20
		W. R. Speas, laboratory fees.....	5.00
15.		J. W. McGee, laboratory fees .....	1.00
		Brevard, water taxes.....	75.05
		Rocky Mount, water taxes.....	15.20
		Washington, water taxes .....	15.20
16.		Elizabeth City, water taxes.....	15.20
		Concord, water taxes.....	15.20
17.		A. M. Wooten, laboratory fees.....	5.00
18.		Lenoir, water taxes.....	15.20
		Monroe, water taxes.....	15.20
20.		Wilmington, water taxes.....	16.00
		Forest City, water taxes .....	15.35
23.		Albert Gooch, Pasteur treatment.....	20.00
27.		Canton and Waynesville, water taxes.....	50.35
28.		Sanford, water taxes.....	15.20
31.		W. D. Gilmore, laboratory fees.....	1.00
		Shelby, water taxes.....	16.00
Feb.	5.	L. K. Matthews, Pasteur treatment.....	20.00
		L. A. Kennedy, Pasteur treatment.....	20.00
8.		Winston-Salem, water taxes.....	30.40
9.		Statesville and Mooresville, water taxes.....	30.40
		Pinehurst, water taxes.....	16.00
10.		Greensboro and High Point, water taxes.....	30.40
13.		Graham and Burlington, water taxes.....	222.30
		Lincolnton, water taxes .....	15.20
15.		Allen Mineral Springs, spring tax.....	48.45
		Lexington and Thomasville, water taxes.....	30.40
		Buckhorn Lithia Water Co., spring tax.....	64.00
18.		Hendersonville, water taxes .....	16.00
20.		J. B. Duke, Pasteur treatment .....	5.00
		Hamlet, water taxes.....	16.00
24.		McDaniel Springs, spring tax.....	14.25
		Virginia Cotton Mills, laboratory fees.....	5.00
		Wilmington Ice and Storage Plant, laboratory fees....	5.00
26.		Water analysis, J. D. Biggs.....	5.00
		G. M. Cooper and A. C. Boyles, laboratory fees.....	10.00
28.		Fonticello Mineral Springs Co., spring tax.....	50.00
7.		State Treasurer, appropriation.....	1,000.00

Mar.	7.	Hilton Lumber Co., laboratory fees.....	\$ 5.00
		Allen C. Banner, Pasteur treatment.....	15.00
		B. A. Hocutt, laboratory fees .....	2.50
		Moore's Springs, spring tax.....	38.00
14.		N. A. Gregory, spring tax.....	7.50
		J. M. Judd, laboratory fees.....	1.00
		Broad Rock M. Springs Co., spring tax.....	15.00
17.		King's Mountain, water taxes.....	48.00
18.		Foy Woodruff, Pasteur treatment.....	20.00
		Mary McLeod, Pasteur treatment.....	20.00
		Smith's Lithia Springs, spring tax.....	28.50
21.		Harris Lithia Springs, spring tax.....	50.00
26.		Hiram Ricker & Sons, spring tax.....	30.00
		N. W. Wallace, Sheriff, spring tax.....	74.25
		Buffalo Lithia Springs Water Co., spring tax.....	40.00
		Seven Springs, spring tax.....	14.20
		Pou Coats, Pasteur treatment.....	10.00
31.		Gilbert C. White, laboratory fees.....	15.00
		R. M. Reid, Pasteur treatment.....	140.00
		J. R. Monroe, laboratory fees.....	5.00
Apr.	5.	Tarboro, water taxes.....	15.20
		Albemarle, water taxes.....	30.40
		E. H. Adkins, laboratory fees.....	5.00
		W. H. Jackson, Pasteur treatment.....	20.00
6.		Oxford, water taxes.....	15.20
7.		Lincolnton, water taxes.....	15.20
		Wilson, water taxes.....	15.20
8.		Laurinburg, water taxes.....	64.00
		Gastonia, water taxes.....	15.20
		Mrs. Kirby, Pasteur treatment.....	20.00
		Murphy, water taxes.....	95.00
9.		Kinston, water taxes.....	30.40
11.		Asheville, Buckeye, Biltmore, water taxes.....	46.30
		Mount Airy, water taxes.....	76.00
12.		Wilkesboro, water taxes.....	60.80
		Salisbury and Spencer, water taxes.....	30.40
14.		Hendersonville, water taxes.....	15.20
		Wadesboro, water taxes.....	15.20
		Asheboro, water taxes.....	16.00
		Hamlet, water taxes.....	16.00
15.		Lenoir, water taxes.....	15.20
May	1.	J. B. Duke, Pasteur treatment.....	5.00
	2.	J. O. Plummer, laboratory fees.....	1.00
		R. S. Stevens, laboratory fees.....	5.00
		Bessie Duke, Pasteur treatment.....	5.00
16.		Concord, water taxes.....	15.20
		Charlotte, water taxes.....	16.00
17.		D. C. Beech, Pasteur treatment.....	40.00
		Thompson and Whitley, laboratory fees.....	5.00
		Wilmington, water taxes.....	15.20
		Greensboro and High Point, water taxes.....	30.40

May	17.	K. C. Moore, laboratory fees.....	\$ 5.00
		Maxton, water taxes.....	16.00
	19.	Monroe, water taxes.....	15.20
	21.	Stafford Mineral Springs, spring tax.....	15.00
		Reidsville, water taxes.....	15.20
		C. Banks McNairy, laboratory fees.....	5.00
	22.	Marion, water taxes.....	15.20
	25.	Rocky Mount, water taxes.....	15.20
	26.	Canton, water taxes.....	15.20
		Reidsville, water taxes.....	15.20
		A. C. Boyles, laboratory fees.....	5.00
		Goldsboro, water taxes.....	15.20
May	18.	Andrews, water taxes.....	80.00
	17.	Forest City, water taxes.....	15.35
	14.	King's Mountain, water taxes.....	16.00
	13.	Pine Bluff, water taxes.....	61.30
	24.	Pinehurst, water taxes.....	16.00
	3.	Salem, water taxes.....	15.25
	1.	Shelby, water taxes.....	16.00
	13.	Southern Pines, water taxes.....	61.30
	5.	Washington, water taxes.....	15.20
	3.	Winston, water taxes.....	15.25
	15.	Huckleberry Spring, spring tax.....	38.00
	5.	Robt. Hartness, Pasteur treatment.....	20.00
		P. G. Fleming, Pasteur treatment.....	22.50
	6.	Ivey Riddick, laboratory fees.....	1.00
	13.	W. T. Parrott, laboratory fees.....	1.00
	19.	J. B. L. Bartlett, laboratory fees.....	20.00
	23.	Carolina Power & Light Co., laboratory fees.....	5.00
		A. C. Irwin, laboratory fees.....	5.00
	24.	Elmira Mills, Pasteur treatment.....	20.00
		H. M. Stovall, Pasteur treatment.....	20.00
	31.	Alex. Sprunt & Son, laboratory fees.....	5.00
June	5.	Charlotte, water taxes.....	16.00
	9.	Dunn, water taxes.....	15.60
	6.	Durham, water taxes.....	15.20
	5.	Davidson College, water taxes.....	16.00
	21.	Tate Springs Co., spring tax.....	40.00
	6.	State Treasurer, appropriation.....	1,000.00
	5.	J. W. Cooper, Pasteur treatment.....	20.00
		Wm. Snow, laboratory fees.....	5.00
		A. W. Goodwin, laboratory fees.....	5.00
	30.	Mrs. Ineva T. Rielly, laboratory fees.....	15.00
	26.	E. J. Long, laboratory fees.....	5.00
		Frank Hobbs, Pasteur treatment.....	20.00
	28.	Clayton Giles, laboratory fees.....	5.00
		Spencer Mountain Mills, laboratory fees.....	10.00
July	23.	Albemarle, water taxes.....	15.20
	22.	Albemarle (municipal), water taxes.....	32.00
	17.	Andrews, water taxes.....	16.00
	18.	Chapel Hill, water taxes.....	32.00

July	14.	Concord, water taxes.....	\$ 15.20
	10.	Elizabeth City, water taxes.....	30.40
	25.	Greensboro, water taxes.....	15.20
	22.	Hamlet, water taxes.....	32.00
	15.	Hendersonville, water taxes.....	15.20
	25.	Hickory, water taxes.....	15.20
		High Point, water taxes.....	15.20
	24.	Lenoir, water taxes.....	15.20
	15.	Lexington, water taxes.....	30.40
	17.	Marion, water taxes.....	15.20
	12.	Maxton, water taxes.....	16.00
	26.	Newton, water taxes.....	15.20
	10.	Oxford, water taxes.....	15.20
	21.	Reidsville, water taxes.....	15.20
	24.	Salisbury, water taxes.....	15.20
	21.	Shelby, water taxes.....	16.00
	24.	Spencer, water taxes.....	15.20
	10.	Tarboro, water taxes.....	15.20
	15.	Thomasville, water taxes.....	30.40
	12.	Wadesboro, water taxes.....	15.20
		Washington, water taxes.....	15.20
	18.	Waynesville, water taxes.....	15.20
	9.	Wilson, water taxes.....	15.20
	3.	Wm. M. Piatt, laboratory fees.....	10.00
	1.	Erwin Cotton Mills, laboratory fees.....	43.00
	10.	S. N. Harrell, laboratory fees.....	5.00
	17.	Carolina Power & Light Co., laboratory fees.....	5.00
	19.	S. B. McLean, laboratory fees.....	5.00
		C. F. Osborn, laboratory fees.....	5.00
	22.	Dr. Stokes, laboratory fees.....	5.00
		Harry and Hubert Huffstater, Pasteur treatment.....	40.00
	23.	F. H. Kimball Co., laboratory fees.....	5.00
	26.	Carolina Power & Light Co., laboratory fees.....	10.00
		W. H. Sprunt, laboratory fees.....	5.00
		Urinalyses .....	2.00
		W. S. Demming, laboratory fees.....	5.00
	28.	Champion Fibre Co., laboratory fees.....	15.00
	29.	Highland Lake Club, laboratory fees.....	7.50
		T. W. Tilghman, laboratory fees.....	5.00
Aug.	11.	Asheboro, water taxes.....	16.00
	21.	Asheville (Buckeye), water taxes.....	15.43
		Asheville City, water taxes.....	15.43
		Biltmore, water taxes.....	15.44
	16.	Durham, water taxes.....	15.20
		King's Mountain, water taxes.....	16.00
	6.	Lincolnton, water taxes.....	15.20
	21.	New Bern, water taxes.....	64.00
	6.	Pine Bluff, water taxes.....	16.00
	31.	Rocky Mount, water taxes.....	15.20
	9.	Wilmington, water taxes.....	15.20
	31.	Davidson College, water taxes.....	16.00

Aug.	30.	State Treasurer, appropriation.....	\$ 1,000.00
	1.	Willard Blaxton, Pasteur treatment.....	20.00
	2.	Alex. Sprunt, laboratory fees.....	5.00
	8.	K. C. Moore, laboratory fees.....	5.00
		S. T. Everett, laboratory fees.....	5.00
	13.	Travelers Hotel Co., laboratory fees.....	5.00
		Young Hartsell Mills Co., laboratory fees.....	.60
		Wilson Lumber & Milling Co., laboratory fees.....	10.00
	22.	Bonlee Milling Co., laboratory fees.....	5.00
	21.	Wm. E. Crutchfield, laboratory fees.....	1.00
		Mengel Box Co., laboratory fees.....	5.00
	30.	H. E. Perry, laboratory fees.....	5.00
Sept.	8.	Charlotte, water taxes.....	16.00
		Forest City, water taxes.....	15.40
	6.	Henderson, water taxes.....	30.40
	4.	Mordecai Spring, spring tax.....	14.25
	2.	State Treasurer, appropriation.....	1,000.00
	4.	A. D. Ipock, laboratory fees.....	5.00
		Independent Ice Co., laboratory fees.....	5.00
		Montgomery Lumber Co., laboratory fees.....	5.00
	6.	High Shoals Co., laboratory fees.....	5.00
	8.	City of Raleigh, laboratory fees.....	125.00
	9.	Reynolds Farms, laboratory fees.....	5.00
	25.	Dr. J. M. Covington, laboratory fees.....	1.00
		W. E. Jeffreys, laboratory fees.....	5.00
		Southern Assembly, laboratory fees.....	10.00
		Johnson & Johnson Co., laboratory fees.....	5.00
		Johnson & Johnson Co., laboratory fees.....	5.00
		Whitehead Stokes Sanatorium, laboratory fees.....	10.00
		Dr. Wyche, laboratory fees.....	1.00
Oct.	20.	Asheboro, water taxes.....	16.00
	22.	Chapel Hill, water taxes.....	16.00
	20.	Concord, water taxes.....	15.20
	22.	Dunn, water taxes.....	45.60
		Elizabeth City, water taxes.....	15.20
	28.	Gastonia, water taxes.....	30.40
	30.	Hickory, water taxes.....	15.20
	14.	Lenoir, water taxes.....	15.20
	22.	Marion, water taxes.....	15.20
	24.	Maxton, water taxes.....	16.00
	30.	Newton, water taxes.....	15.20
	29.	Oxford, water taxes.....	15.20
	17.	Pinehurst, water taxes.....	16.00
	13.	Raleigh, water taxes.....	76.00
	20.	Reidsville, water taxes.....	15.20
	4.	Salem, water taxes.....	15.20
	22.	Salisbury, water taxes.....	15.20
		Spencer, water taxes.....	15.20
	14.	Tarboro, water taxes.....	15.20
	24.	Wadesboro, water taxes.....	15.20
	17.	Washington, water taxes.....	15.20

## FIFTEENTH BIENNIAL REPORT

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Oct.	24.	Wilson, water taxes.....	\$	15.20
	4.	Winston, water taxes.....		15.20
	30.	Winston, water taxes.....		15.20
	7.	State Treasurer, appropriation.....		1,000.00
	2.	J. W. Nowell, Pasteur treatment.....		10.00
	9.	Mecklenburg Manufacturing Co., laboratory fees.....		25.00
	11.	W. T. Turlington, laboratory fees.....		1.00
	20.	J. W. Nowell, Pasteur treatment.....		10.00
	29.	Examination of tumor.....		5.00
	30.	J. D. Cockran, laboratory fees.....		1.00
		W. E. Jeffreys, laboratory fees.....		5.00
	27.	Carolina, Clinchfield & Ohio R. R., laboratory fees.....		5.70
		Rocky Mt. Ice and Fuel Co., laboratory fees.....		5.00
Nov.	8.	Albemarle, water taxes.....		15.20
		Albemarle (municipal), water taxes.....		15.20
	10.	Andrews, water taxes.....		15.20
	20.	Asheville (Buckeye), water taxes.....		15.44
		Asheville City, water taxes.....		15.44
		Biltmore, water taxes.....		15.44
	13.	Charlotte, water taxes.....		16.00
	16.	Durham, water taxes.....		15.20
	5.	Greensboro, water taxes.....		15.20
		High Point, water taxes.....		15.20
	1.	Lexington, water taxes.....		15.20
	15.	Lincolnton, water taxes.....		15.20
	21.	Mooresville, water taxes.....		30.40
		Mount Airy, water taxes.....		30.40
	29.	Pinehurst, water taxes.....		16.00
	4.	Rocky Mount, water taxes.....		15.20
	21.	Statesville, water taxes.....		30.40
	1.	Thomasville, water taxes.....		15.20
	26.	Waynesville, water taxes.....		30.40
	18.	Wilmington, water taxes.....		15.20
	13.	Davidson College, water taxes.....		16.00
	11.	State Treasurer, appropriation.....		3,500.00
	1.	Amer. Agri. Chem. Co., laboratory fees.....		5.00
	7.	Erwin Cotton Mills Co., laboratory fees.....		25.00
	13.	Winifred Bragaw, Pasteur treatment.....		20.00
	7.	Atlantic Trust & Banking Co., laboratory fees.....		5.00
	19.	E. B. Ferebee, laboratory fees.....		1.00
	20.	Brown Manufacturing Co., laboratory fees.....		5.00
Dec.	19.	Andrews, water taxes.....		15.20
		Forest City, water taxes.....		15.20
		Greenville, water taxes.....		48.00
		Forest City, water taxes.....		15.36
		Greenville, water taxes.....		48.00
	30.	Henderson, water taxes.....		30.40
	31.	Hendersonville, water taxes.....		16.00
		Kinston, water taxes.....		30.40
	19.	Murphy, water taxes.....		45.60
		New Bern, water taxes.....		16.00

Dec.	19.	Rutherfordton, water taxes.....	\$ 20.16
	20.	Shelby, water taxes.....	16.00
	19.	Hall & Pearson, laboratory fees.....	5.00
		R. J. Riddick, laboratory fees.....	1.00
		Dr. W. D. Gilmore, laboratory fees.....	2.00
		W. L. Parsley, laboratory fees.....	10.00
		W. C. Atwell, Pasteur treatment.....	10.00
		S. C. Averitt, Pasteur treatment.....	20.00
	23.	Johnson & Johnson, laboratory fees.....	5.00
		Geo. Haynes, Jr., Pasteur treatment.....	20.00
	30.	M. A. McCaskell, Pasteur treatment.....	20.00
		R. I. Byrum, Pasteur treatment.....	20.00
	<b>1914.</b>		
Jan.	5.	Edenton, water taxes.....	61.00
	17.	Elizabeth City, water taxes.....	25.00
	3.	Goldsboro, water taxes.....	30.40
	28.	Lumberton, water taxes.....	80.00
	29.	Monroe, water taxes.....	60.80
	5.	Mt. Olive, water taxes.....	15.20
	24.	North Wilkesboro, water taxes.....	60.80
	12.	Raleigh, water taxes.....	81.00
	17.	Roxboro, water taxes.....	60.80
	12.	Tryon, water taxes.....	100.00
	28.	Allen's Mineral Springs, spring tax.....	30.00
	16.	Benton Springs, spring tax.....	15.00
	27.	Derita Water Co., spring tax.....	50.00
	3.	McDaniel Lithia Springs, spring tax.....	15.00
	5.	Mordecai Springs Co., spring tax.....	15.00
	6.	Piney Mountain, spring tax.....	30.00
	5.	N. C. Hunter, laboratory fees.....	2.50
	9.	J. T. Bunn, Pasteur treatment.....	20.00
	16.	F. M. Shearon, Pasteur treatment.....	20.00
	23.	Southern Railway Co., laboratory fees.....	5.00
Feb.	3.	Asheboro, water taxes.....	16.00
		Albemarle, water taxes.....	30.40
		Albemarle, municipal water taxes.....	15.20
	20.	Brevard, water taxes.....	60.80
	5.	Bryson City, water taxes.....	144.00
	7.	Bryson City, water taxes.....	16.00
	6.	Dunn, water taxes.....	30.40
	4.	Elizabeth City, water taxes.....	15.20
	7.	Forest City, water taxes.....	30.80
	3.	Gastonia, water taxes.....	50.35
	11.	Greensboro, water taxes.....	15.20
	24.	Hamlet, water taxes.....	32.00
	5.	Hendersonville, water taxes.....	15.20
	11.	Hickory, water taxes.....	15.20
		High Point, water taxes.....	30.40
	5.	King's Mountain, water taxes.....	32.00
	4.	Laurinburg, water taxes.....	61.80
	13.	Lenoir, water taxes.....	16.00

Feb.	20.	Lexington, water taxes.....	\$ 15.20
	9.	Lincolnton, water taxes.....	15.20
	3.	Marion, water taxes.....	15.20
	10.	Maxton, water taxes.....	37.00
	21.	Mt. Airy, water taxes.....	19.95
	3.	Mt. Olive, water taxes.....	15.20
	11.	Newton, water taxes.....	15.20
	6.	Oxford, water taxes.....	30.40
	3.	Pine Bluff, water taxes.....	30.40
	19.	Reidsville, water taxes.....	15.20
	25.	Rocky Mount, water taxes.....	15.20
	25.	Rutherfordton, water taxes.....	15.35
	7.	Red Springs, water taxes.....	32.00
		Salisbury, water taxes.....	15.20
	3.	Southern Pines, water taxes.....	45.60
	7.	Spencer, water taxes.....	15.20
	20.	Thomasville, water taxes.....	15.20
	11.	Wadesboro, water taxes.....	15.20
	18.	Wilmington, water taxes.....	15.20
	13.	Davidson College, water taxes.....	16.00
	2.	Concord, water taxes.....	29.45
	9.	Chapel Hill, water taxes.....	16.00
	24.	Buckhorn Lithia Springs, spring tax.....	64.00
	14.	Jackson Spring Water Co., spring tax.....	15.00
	3.	Lincoln Lithia Springs Co., spring tax.....	40.00
	11.	Mt. Vernon Springs, spring tax.....	15.00
	16.	Seven Springs, spring tax.....	20.00
	20.	Broad Rock Springs, Inc., spring tax.....	20.00
	25.	Chase City Calcium Water Co., spring tax.....	15.00
	20.	Harris Lithia Water Co., spring tax.....	64.00
	14.	Poland Springs, spring tax.....	30.00
	25.	Stafford Mineral Springs, spring tax.....	20.00
	5.	Dr. R. S. Stevens, laboratory fees.....	1.00
	10.	Commercial National Bank, laboratory fees.....	10.00
	19.	Dr. F. E. Perkins, Southern Railway Co., laboratory fees	5.00
	21.	Kimball Water Co., laboratory fees.....	5.00
		Crystal Ice Co., laboratory fees.....	5.00
	24.	Fayetteville Ice & Manufacturing Co., laboratory fees...	5.00
	25.	Dr. A. W. Knox, laboratory fees.....	1.00
	19.	Southern Railway Co., laboratory fees.....	66.20
	5.	Edison Bass, Pasteur treatment.....	20.00
		Dr. W. P. Reaves, laboratory fees.....	5.00
	6.	Dr. R. E. Martin, laboratory fees.....	1.00
	10.	Dr. C. D. Wyche, laboratory fees.....	1.00
	18.	Smith's Lithia Springs, spring tax.....	28.50
		Bruce Derrick, laboratory fees.....	1.00
Mar.	14.	Durham Water Co., water taxes.....	30.40
	9.	Goldsboro, water taxes.....	30.40
	18.	Henderson, water taxes.....	15.20
	14.	Salem, water taxes.....	19.95
	9.	Washington, water taxes.....	30.40

Mar.	6.	Moore's Springs, spring tax.....	\$ 40.00
	9.	Buffalo Lithia Springs, spring tax.....	40.00
	10.	Dr. R. S. Stevens, laboratory fees.....	1.00
		Citizens National Bank, laboratory fees.....	5.00
	31.	Black Mountain Railroad, laboratory fees.....	10.00
		Independent Ice Co., laboratory fees.....	5.00
		Dr. A. H. McLeod, laboratory fees.....	1.00
		Dr. P. H. Williams, laboratory fees.....	1.00
		J. P. Monroe, laboratory fees.....	1.00
	16.	J. B. Blades, Crystal Ice Co., laboratory fees.....	5.00
	21.	New Bern Ice Co., laboratory fees.....	10.00
	20.	Dr. T. C. Quickel, laboratory fees.....	5.00
	6.	Dr. Lynn McIver, laboratory fees.....	1.00
	16.	Salem, water tax.....	15.20
Apr.	23.	Bryson City, water taxes.....	16.00
	24.	Henderson, water taxes.....	15.20
	23.	Marion, water taxes.....	15.20
	25.	Mount Airy, water taxes.....	15.20
	18.	Raleigh, water taxes.....	181.45
	27.	Selma, water taxes.....	30.40
		Smithfield, water taxes.....	30.40
	18.	Tarboro, water taxes.....	30.40
		Wadesboro, water taxes.....	15.20
	23.	Wilson, water taxes.....	32.30
	27.	Concord, water taxes.....	15.20
	10.	Dr. Lynn McIver, laboratory fees.....	1.00
	6.	Johnson & Johnson Co., laboratory fees.....	2.50
		E. B. Glenn, laboratory fees.....	5.00
		Dr. P. H. Williams, laboratory fees.....	1.00
	10.	H. K. Toot, Pasteur treatment.....	20.00
	18.	J. B. L. Bartlett, laboratory fees.....	25.00
	22.	Belhaven Light & Ice Co., laboratory fees.....	5.00
		J. O. Plummer, laboratory fees.....	1.00
	28.	J. O. Plummer, laboratory fees.....	1.00
May	22.	Biltmore, water taxes.....	32.00
	8.	Greensboro, water taxes.....	15.20
	11.	Hickory, water taxes.....	19.95
	6.	King's Mountain, water taxes.....	16.00
	5.	Lenoir, water taxes.....	15.20
	18.	Lexington, water taxes.....	15.20
	4.	Lincolnton, water taxes.....	15.20
	11.	Newton, water taxes.....	15.20
		Reidsville, water taxes.....	15.20
	5.	Chapel Hill, water taxes.....	15.20
	18.	Thomasville, water taxes.....	19.95
	5.	Asheboro, water taxes.....	15.20
	26.	Rocky Mount, water taxes.....	15.20
	5.	Salisbury, water taxes.....	15.20
		Spencer, water taxes.....	15.20
	7.	Rutherfordton, water taxes.....	15.35
	19.	Wilmington, water taxes.....	15.20

May.	12.	Vandora Springs, spring tax.....	\$	15.00
	5.	Dr. W. T. Parrott, laboratory fees.....		5.00
	15.	R. J. Reynolds Tobacco Co., laboratory fees.....		5.00
	19.	Lenoir Oil and Ice Co., laboratory fees.....		5.00
	21.	Dr. J. S. McKee, laboratory fees.....		1.00
	23.	Dr. Louis West, laboratory fees.....		1.00
	5.	S. B. Thomas, Pasteur treatment.....		20.00
		J. O. Plummer, laboratory fees.....		1.00
	28.	State Treasurer, appropriation.....		1,000.00 —
June	2.	Pinehurst, water taxes.....		32.00
	29.	Salem, water taxes.....		15.20
		Winston, water taxes.....		15.20
	1.	Shivar Springs, spring tax.....		64.00
		Citizens National Bank, laboratory fees.....		5.00
	23.	Southern Aluminum Co., laboratory fees.....		10.00
	5.	Hamlet Ice Co., laboratory fees.....		5.00
	3.	Dr. M. T. Frizelle, laboratory fees.....		1.00
	17.	Dr. J. C. Ray, laboratory fees.....		2.00
	18.	Carolina Power & Light Co., laboratory fees.....		5.00
	6.	Belhaven Light & Ice Co., laboratory fees.....		5.00
	8.	T. M. Haywood, Pasteur treatment.....		5.00
	11.	J. N. Sloan, laboratory fees.....		1.00
	17.	H. G. Woodard, laboratory fees.....		1.00
	18.	A. W. Knox, laboratory fees.....		1.00
	29.	A. C. Jordon, laboratory fees.....		5.00
July	7.	Catawba Ice and Fuel Co., laboratory fees.....		5.00
	2.	J. S. Bromfield, laboratory fees.....		5.00
	22.	Erwin Cotton Mills, laboratory fees.....		5.00
	30.	Dr. Hubert Haywood, laboratory fees.....		1.00
	3.	D. H. Graves, laboratory fees.....		5.00
		Dr. D. Dixon-Carroll, laboratory fees.....		3.00
	13.	W. B. Enoch, Pasteur treatment.....		20.00
		Washington Buggy Co., laboratory fees.....		10.00
	22.	H. Pearson, laboratory fees.....		5.00
		Dr. H. H. Rose, laboratory fees.....		1.00
	28.	Asheville City, water taxes.....		46.32
	18.	Albemarle, water taxes.....		15.20
		Albemarle (municipal), water taxes.....		30.40
	22.	Andrews, water taxes.....		30.40
	28.	Asheville (Buckeye), water taxes.....		46.32
	27.	Biltmore, water taxes.....		16.00
	14.	Bryson City, water taxes.....		16.00
	24.	Dunn, water taxes.....		15.60
	30.	Forest City, water taxes.....		15.35
	31.	Gastonia, water taxes.....		15.20
	16.	Goldsboro, water taxes.....		15.20
	24.	Greensboro, water taxes.....		15.20
	18.	Hamlet, water taxes.....		16.00
		Hendersonville, water taxes.....		32.00
	24.	Hickory, water taxes.....		15.20
		High Point, water taxes.....		15.20

July	20.	Kinston, water taxes.....	\$ 48.00
	17.	Lenoir, water taxes.....	15.20
	16.	Mt. Airy, water taxes.....	15.20
		Mt. Olive, water taxes.....	30.40
	24.	Newton, water taxes.....	15.20
	13.	Oxford, water taxes.....	15.20
	20.	Rocky Mount, water taxes.....	15.20
	30.	Rutherfordton, water taxes.....	15.35
	17.	Salisbury, water taxes.....	15.20
		Spencer, water taxes.....	15.20
	13.	Tarboro, water taxes.....	15.20
		Wadesboro, water taxes.....	15.20
	20.	Wilmington, water taxes.....	15.20
	16.	Wilson, water taxes.....	16.00
	25.	Davidson College, water taxes.....	32.00
	13.	Concord, water taxes.....	16.00
	1.	Mooresville, water taxes.....	32.00
		Statesville, water taxes.....	32.00
	27.	Tate Springs Hotel Co., spring tax.....	40.00
	22.	Vade Mecum Springs, spring taxes.....	30.00
	3.	Dr. E. Delia Dixon Carroll, laboratory fees.....	3.00
	4.	Rocky Mount Ice & Fuel Co., laboratory fees.....	5.00
	6.	Dr. S. W. Staley, laboratory fees.....	5.00
Aug.	1.	Charlotte, water taxes.....	32.00
	3.	Elizabeth City, water taxes.....	15.20
	25.	Hot Springs, water taxes.....	76.00
	13.	Lincolnton, water taxes.....	15.20
	27.	New Bern, water taxes.....	32.00
	7.	Reidsville, water taxes.....	15.30
	1.	Red Springs, water taxes.....	16.00
	14.	Tryon, water taxes.....	32.00
	5.	Washington, water taxes.....	15.20
	21.	Crystal Ice Co., laboratory fees.....	5.00
	18.	Monroe Ice & Fuel Co., laboratory fees.....	5.00
	24.	Catawba Ice & Fuel Co., laboratory fees.....	5.00
	7.	Dr. J. H. Saunders, laboratory fees.....	1.00
	13.	Dr. Hubert Haywood, laboratory fees.....	1.00
	12.	Erlanger Cotton Mills, laboratory fees.....	5.00
	28.	Frank M. Inman, laboratory fees.....	5.00
	1.	Maxton, water taxes.....	16.00
		Mrs. Dora W. Doe, laboratory fees.....	5.00
	26.	Thos. H. Briggs & Sons, laboratory fees.....	5.00
	31.	Dr. H. H. Haywood, laboratory fees.....	1.00
Sept.	18.	Durham Water Co., water taxes.....	35.15
	1.	Elizabeth City, water taxes.....	15.20
	24.	Henderson, water taxes.....	15.20
	18.	King's Mountain, water taxes.....	16.00
	7.	Shelby, water taxes.....	53.00
	9.	Selma, water taxes.....	30.40
		Smithfield, water taxes.....	30.40
	23.	Fayetteville Ice & Manufacturing Co., laboratory fees...	5.00

Sept.	11.	Black Mountain Railroad, laboratory fees.....	\$ 5.00
	21.	Southern Railway, laboratory fees.....	5.00
	12.	J. B. Blades, Crystal Ice Co., laboratory fees.....	5.00
	18.	Dr. B. A. Hocutt, laboratory fees.....	3.00
		Dr. W. T. Parrott, laboratory fees.....	5.00
	11.	R. J. Reynolds Tobacco Co., laboratory fees.....	10.00
	12.	Henry Beatty, laboratory fees.....	1.05
	24.	Dr. N. C. Hunter, laboratory fees.....	5.00
	12.	Adlai Osborne, laboratory fees.....	15.00
		Dr. W. A. Monroe, laboratory fees.....	2.00
	7.	Champion Fibre Co., laboratory fees.....	10.00
	11.	Dr. J. W. McLean, laboratory fees.....	1.00
	5.	Dr. H. A. Royster, laboratory fees.....	5.00
	18.	W. H. Sprunt, laboratory fees.....	10.00
		Telfair Stockton, laboratory fees.....	5.00
Oct.	9.	R. L. Smith, laboratory fees.....	5.00
	13.	Dr. I. M. Hardy, laboratory fees.....	5.00
	24.	O. K. Proctor, laboratory fees.....	5.00
	28.	Dr. R. E. Martin, laboratory fees.....	1.00
	26.	Asheboro, water taxes.....	15.20
	17.	Albemarle, water taxes.....	15.20
		Albemarle, water taxes.....	15.20
	24.	Andrews, water taxes.....	30.40
	27.	Biltmore, water taxes.....	16.00
	17.	Dunn, water taxes.....	15.60
	24.	Gastonia, water taxes.....	15.20
		Hickory, water taxes.....	15.20
	17.	Kinston, water taxes.....	16.00
	6.	Lexington, water taxes.....	15.20
	17.	Marion, water taxes.....	15.20
	31.	Maxton, water taxes.....	16.00
	19.	Mount Airy, water taxes.....	15.20
	24.	Murphy, water taxes.....	30.40
		Newton, water taxes.....	15.20
	19.	Oxford, water taxes.....	15.20
	28.	Reidsville, water taxes.....	15.20
	24.	Rocky Mount, water taxes.....	15.20
	19.	Tarboro, water taxes.....	15.20
	6.	Thomasville, water taxes.....	15.20
	30.	Wadesboro, water taxes.....	15.20
	19.	Wilson, water taxes.....	16.30
	5.	Southern Railway Co., laboratory fees.....	15.00
	24.	Dr. L. O. Hays, laboratory fees.....	1.00
	13.	Dr. W. T. Parrott, laboratory fees.....	5.00
	3.	Southern Railway Co., Transylvania Division, lab. fees	5.00
	13.	Dr. A. E. Knoefel, laboratory fees.....	1.00
	16.	J. W. Porter, laboratory fees.....	5.00
Nov.	13.	Asheville (Buckeye), water taxes.....	15.44
	3.	Greensboro, water taxes.....	15.20
	17.	Henderson, water taxes.....	15.20
	3.	High Point, water taxes.....	15.20

## NORTH CAROLINA BOARD OF HEALTH

Nov. 20.	Kings Mountain, water taxes.....	\$ 16.00
14.	Lincolnton, water taxes.....	15.20
7.	Salem, water taxes.....	15.20
6.	Salisbury, water taxes.....	15.20
	Spencer, water taxes.....	15.20
17.	Washington, water taxes.....	15.20
27.	Wilmington, water taxes.....	15.20
7.	Winston, water taxes.....	15.20
25.	Concord, water taxes.....	15.20
	Dr. W. E. Crutchfield, laboratory fees.....	1.00
11.	Dr. H. A. Royster, laboratory fees.....	5.00
10.	Dr. I. M. Hardy, laboratory fees.....	1.00
4.	Drs. Baker, Thigpen and Green, laboratory fees.....	5.00
27.	Dr. Jno. L. Carroll, laboratory fees.....	1.00
16.	Dr. W. P. Whittington, laboratory fees.....	5.00
13.	Asheville City, water taxes.....	15.44

*State Board of Health, Hookworm Fund.*

		DISBURSEMENTS.	
Dec.	3.	W. P. Jacocks, salary.....	\$ 125.00
		T. E. Hughes, salary.....	125.00
		Mrs. C. L. Pridgen, salary.....	50.00
		Chas. Stephenson, salary.....	40.00
4.		T. E. Hughes, traveling expenses.....	87.18
		W. P. Jacocks, traveling expenses.....	97.42
13.		T. E. Hughes, salary.....	125.00
		W. P. Jacocks, salary.....	125.00
		Mrs. C. L. Pridgen, salary.....	50.00
		Chas. Stephenson, salary.....	40.00
		John A. Ferrell, salary.....	125.00
1913.			
Jan.	8.	W. P. Jacocks, traveling expenses.....	38.80
	14.	T. E. Hughes, traveling expenses.....	58.10
	17.	Lewis, Battle & Tucker, rent.....	30.00
Feb.	4.	T. E. Hughes, salary.....	125.00
		W. P. Jacocks, salary.....	125.00
		Mrs. C. L. Pridgen, salary.....	50.00
		Chas. Stephenson, salary.....	12.00
	8.	W. P. Jacocks, traveling expenses.....	65.71
		T. E. Hughes, traveling expenses.....	87.55
Mar.	1.	T. E. Hughes, salary.....	125.00
		W. P. Jacocks, salary.....	125.00
		Mrs. C. L. Pridgen, salary.....	50.00
		Chas. Stephenson, salary.....	40.00
	6.	T. E. Hughes, traveling expenses.....	80.20
		W. P. Jacocks, traveling expenses.....	52.47
	31.	R. O. Self, traveling expenses.....	50.00
Apr.	1.	T. E. Hughes, salary.....	125.00
		W. P. Jacocks, salary.....	125.00
		Mrs. C. L. Pridgen, salary.....	50.00
		Chas. Stephenson, salary.....	40.00
		Jno. A. Ferrell, salary.....	125.00
		T. E. Hughes, traveling expenses.....	63.00
	4.	Lewis, Battle & Tucker, rent.....	30.00
		W. P. Jacocks, traveling expenses.....	76.21
May	1.	W. P. Jacocks, salary.....	125.00
		Mrs. C. L. Pridgen, salary.....	50.00
	8.	W. P. Jacocks, traveling expenses.....	72.07
		R. O. Self, salary.....	100.00
June	2.	W. P. Jacocks, salary.....	125.00
		B. E. Washburn, salary.....	25.00
		Gordon Rhodes, salary.....	40.00
	7.	R. O. Self, salary.....	178.01
	9.	W. P. Jacocks, traveling expenses.....	86.43
		B. E. Washburn, traveling expenses.....	16.75

July	2.	John A. Ferrell, salary.....	\$ 125.00
		W. P. Jacocks, salary.....	125.00
		B. E. Washburn, salary.....	125.00
		Gordon Rhodes, salary.....	40.00
		Harold W. Rose, salary.....	20.00
		B. E. Washburn, traveling expenses.....	77.31
	3.	W. P. Jacocks, traveling expenses.....	68.00
		Arthur H. Thomas Co., microscope and slides.....	137.70
	19.	Lewis, Battle & Tucker, rent.....	30.00
	30.	B. E. Washburn, salary.....	125.00
		W. P. Jacocks, salary.....	125.00
		Harold Rose, salary.....	40.00
Aug.	8.	W. P. Jacocks, traveling expenses.....	68.36
		B. E. Washburn, traveling expenses.....	89.70
	11.	C. E. Johnson, rent.....	10.00
	18.	C. L. Pridgen, salary.....	20.00
	19.	Powell & Powell, ice.....	1.00
	30.	Harold Rose, salary.....	20.00
		D. C. Absher, salary.....	125.00
		B. E. Washburn, salary.....	125.00
Sept.	1.	C. E. Johnson, Pres. rent.....	10.00
	5.	B. E. Washburn, traveling expenses.....	82.85
		D. C. Absher, traveling expenses.....	82.10
	6.	Harold Rose, salary.....	10.00
	10.	Alfred Williams & Co., cameras and films.....	62.95
	22.	Rockefeller Sanitary Commission, refund.....	65.01
		Public Service Cup Co., drinking cups.....	8.00
	27.	D. C. Absher, salary.....	125.00
		B. E. Washburn, salary.....	125.00
Oct.	6.	D. C. Absher, traveling expenses.....	79.95
		B. E. Washburn, traveling expenses.....	65.35
		Dobbin & Ferrall Co., awnings.....	12.24
		W. P. Jacocks.....	8.00
	13.	C. L. Pridgen, cash advanced for washstand.....	2.00
	18.	Swindell-Barnes Co., rubber stamps.....	1.20
	20.	B. E. Washburn, cash advanced for repairs to microscope	2.50
	31.	Dr. B. E. Washburn, salary.....	125.00
		Dr. D. C. Absher, salary.....	125.00
		J. C. Brantley, supplies.....	4.00
Nov.	1.	B. E. Washburn, traveling expenses.....	69.95
		D. C. Absher, traveling expenses.....	74.00
	7.	Powell & Powell, ice.....	2.00
	15.	C. E. Johnson, President, rent.....	20.00
		J. Frank Cress, traveling expenses.....	28.95
	29.	C. E. Johnson, President, rent.....	10.00
		B. E. Washburn, salary.....	125.00
		D. C. Absher, salary.....	125.00
Dec.	11.	D. C. Absher, traveling expenses.....	64.40
		Dr. B. E. Washburn, traveling expenses.....	47.40
		L. A. Emory, stove.....	12.25
		Alfred Williams & Co., supplies.....	5.60

Dec.	16.	Dr. B. E. Washburn, salary.....	\$ 125.00
		D. C. Absher, salary.....	125.00
		C. E. Johnson, rent.....	10.00
		J. Frank Cress, traveling expenses.....	36.30
		Mrs. Warren H. Booker, red cross seals.....	1.00
23.		W. G. Briggs, Postmaster, postage and box rent.....	4.50
		Southern Express Co., express.....	2.14
<b>1914.</b>			
Jan.	8.	Dr. B. E. Washburn, traveling expenses.....	52.22
	23.	W. P. Jacocks.....	13.60
	27.	Dr. D. C. Absher, traveling expenses.....	71.35
	30.	C. E. Johnson, rent.....	10.00
		D. C. Absher, salary.....	125.00
		Dr. B. E. Washburn, salary.....	125.00
		Bureau of Eng. and Education, multigraphing.....	8.57
Feb.	4.	Dr. B. E. Washburn, traveling expenses.....	72.40
	7.	Southern Bell Telephone Co., long distance.....	2.25
		D. C. Absher, traveling expenses.....	39.10
	16.	Arthur H. Thomas Co., slides.....	38.88
	17.	Bureau Vital Statistics, cash advanced for painting.....	8.13
	27.	D. C. Absher, salary.....	125.00
		B. E. Washburn, salary.....	125.00
	28.	Carver Smith, salary.....	17.34
	27.	C. E. Johnson, rent.....	10.00
Mar.	3.	B. E. Washburn, traveling expenses.....	71.60
		D. C. Absher, traveling expenses.....	69.45
	18.	John Doane, salary.....	100.00
		Thos. H. Briggs & Sons, supplies.....	5.10
		Southern Bell Telephone & Telegraph Co., long distance	.75
	23.	E. Carver Smith, salary.....	22.66
	30.	John H. Doane, salary.....	25.00
		D. C. Absher, salary.....	125.00
		B. E. Washburn, salary.....	125.00
		C. E. Johnson, rent.....	10.00
		W. G. Briggs, Postmaster, box rent.....	1.50
	31.	John H. Doane, traveling expenses.....	80.13
		D. C. Absher, traveling expenses.....	80.40
		Alfred Williams & Co., office supplies.....	1.15
		B. E. Washburn, traveling expenses.....	78.75
Apr.	4.	W. P. Jacocks, cash advanced for supplies.....	2.96
	18.	G. H. Dortch & Bro., insurance.....	7.85
	20.	B. E. Washburn, salary.....	83.34
		B. E. Washburn, traveling expenses.....	61.30
	30.	Dr. D. C. Absher, salary.....	125.00
		Dr. John H. Doane, salary.....	125.00
		Dr. D. C. Absher, traveling expenses.....	67.25
		Dr. John H. Doane, traveling expenses.....	75.25
May	1.	Dr. John H. Doane, traveling expenses.....	50.00
		Dr. D. C. Absher, traveling expenses.....	50.00
	11.	G. F. Leonard, cash advanced for salary.....	10.00

May	29.	C. E. Johnson, rent.....	\$ 20.00
		D. C. Absher, salary.....	125.00
		John H. Doane, salary.....	125.00
		Emily Boyd, salary.....	20.00
		Dr. Jno. Collinson, films and pictures.....	16.24
June	8.	Southern Express Co., express.....	1.10
		Dr. John H. Doane, traveling expenses.....	28.13
		Dr. John H. Doane, traveling expenses.....	50.00
		D. C. Absher, traveling expenses.....	50.00
	10.	D. C. Absher, traveling expenses.....	65.24
	30.	W. P. McKay, salary.....	17.33
		D. C. Absher, salary.....	125.00
		Dr. J. H. Doane, salary.....	125.00
		Emily Boyd, salary.....	10.00
		D. C. Absher, traveling expenses.....	50.00
		Dr. J. H. Doane, traveling expenses.....	50.00
		W. G. Briggs; Postmaster, box rent.....	1.50
		C. E. Johnson, rent.....	10.00
July	1.	P. W. Covington, traveling expenses.....	16.06
	2.	D. C. Absher, traveling expenses.....	10.99
	4.	Dr. John H. Doane, traveling expenses.....	28.04
		Emily Boyd, salary.....	10.00
	16.	Rockefeller Sanitary Commission, refund on expenses...	8.36
	31.	P. W. Covington, salary.....	93.67
		D. C. Absher, salary.....	125.00
		D. C. Absher, traveling expenses.....	50.00
		W. P. McKay, salary.....	40.00
		P. W. Covington, traveling expenses.....	50.00
		C. E. Johnson, rent.....	10.00
Aug.	1.	J. H. Doane, traveling expenses.....	.27
		J. H. Doane, salary.....	45.10
		W. S. Tuttle, traveling expenses.....	60.90
	4.	Dr. D. C. Absher, traveling expenses.....	25.50
		Dr. P. W. Covington, traveling expenses.....	76.00
	31.	Dr. D. C. Absher, salary.....	150.00
		Dr. D. C. Absher, traveling expenses.....	50.00
		W. P. McKay, salary.....	40.00
		P. W. Covington, salary.....	150.00
		P. W. Covington, traveling expenses.....	50.00
		Dr. W. H. Kibler, traveling expenses.....	50.00
		Emily Boyd, salary.....	10.00
Sept.	1.	C. E. Johnson, rent.....	10.00
	4.	Dr. W. H. Kibler, salary.....	61.50
	9.	Dr. D. C. Absher, traveling expenses.....	22.50
	15.	P. W. Covington, traveling expenses.....	26.35
	28.	D. C. Absher, salary.....	150.00
		D. C. Absher, traveling expenses.....	50.00
		P. W. Covington, salary.....	150.00
		P. W. Covington, traveling expenses.....	50.00
		Dr. W. H. Kibler, salary.....	125.00
		Dr. W. H. Kibler, traveling expenses.....	50.00
		Emily Boyd, salary.....	10.00

Sept.	28.	W. P. McKay, salary.....	\$ 40.00
		W. G. Briggs, Postmaster, box rent.....	1.50
30.		C. E. Johnson, rent.....	10.00
		Rockefeller Sanitary Commission, refund on expenses....	50.00
Oct.	5.	Dr. W. H. Kibler, traveling expenses.....	23.33
		P. W. Covington, traveling expenses.....	52.57
		D. C. Absher, traveling expenses.....	32.05
12.		Macy and Lawler, lettering doors.....	3.50
30.		D. C. Absher, salary.....	150.00
		D. C. Absher, traveling expenses.....	50.00
		S. R. McKay, salary.....	40.00
		T. B. Stancell, salary.....	18.33
		P. W. Covington, salary.....	150.00
		P. W. Covington, traveling expenses.....	50.00
		Dr. W. H. Kibler, salary.....	125.00
		Dr. W. H. Kibler, traveling expenses.....	50.00
		Emily Boyd, salary.....	10.00
Nov.	9.	Dr. D. C. Absher, traveling expenses.....	32.92
		Dr. P. W. Covington, traveling expenses.....	33.19
10.		Dr. W. H. Kibler, traveling expenses.....	28.83
30.		Dr. W. H. Kibler, salary.....	125.00
		Dr. W. H. Kibler, traveling expenses.....	50.00
		Dr. D. C. Absher, salary.....	150.00
		Dr. D. C. Absher, traveling expenses.....	50.00
		S. R. McKay, salary.....	40.00
		T. B. Stancell, salary.....	50.00
		T. P. Pace, salary.....	50.00
		Dr. P. W. Covington, salary.....	150.00
		Dr. P. W. Covington, traveling expenses.....	50.00
		Emily Boyd, salary.....	10.00

RECEIPTS.			
Dec.	1.	Balance .....	359.01
	4.	N. C. State Board of Health, appropriation.....	500.00
	26.	N. C. State Board of Health, appropriation.....	500.00
1913.			
Feb.	7.	N. C. State Board of Health, appropriation.....	500.00
Mar.	6.	N. C. State Board of Health, appropriation.....	500.00
Apr.	2.	N. C. State Board of Health, appropriation.....	500.00
May	1.	N. C. State Board of Health, appropriation.....	500.00
June	18.	N. C. State Board of Health, appropriation.....	1,000.00
Aug.	5.	N. C. State Board of Health, appropriation.....	500.00
	25.	Rockefeller Sanitary Commission.....	65.01
Sept.	2.	N. C. State Board of Health, appropriation.....	1,000.00
Nov.	12.	State appropriation.....	1,500.00
1914.			
June	17.	State Treasurer, appropriation.....	2,000.00 -
July	30.	State Treasurer, appropriation.....	2,000.00 -
Sept.	8.	State Treasurer, appropriation.....	1,000.00 -
Oct.	14.	Refund on insurance.....	.75
Nov.	7.	State Treasurer, appropriation.....	2,000.00 -
	25.	State Treasurer, appropriation.....	1,000.00 -

*Bureau of Vital Statistics.*

1913	DISBURSEMENTS.	
Jan. 18.	Lucy Davis, copying certificates.....	\$ 5.53
Feb. 4.	Lucy Davis, copying certificates.....	15.00
	25. Lucy Davis, copying certificates.....	7.36
July 31.	Lucy Davis, copying certificates.....	16.30
Aug. 30.	Lucy Davis, copying certificates.....	11.00
Sept. 27.	Inez Reynolds, salary.....	5.00
Oct. 31.	Inez Reynolds, clerical work.....	5.00
Nov. 22.	T. Peyton Brown, copying certificates.....	8.96
	29. T. Peyton Brown, copying certificates.....	3.85
	Inez Reynolds, salary.....	5.00
July 5.	Sylvester Dunston, cleaning walls.....	8.00
	8. W. G. Briggs, Postmaster, postage.....	31.00
	9. Lurena Holloway, cleaning office.....	.40
	11. Seaton G. Turner, polishing floor.....	2.00
	17. Swindell Co., rubber stamp.....	.60
	W. G. Briggs, Postmaster, postage.....	45.00
	23. Scarborough Map Co., map.....	2.50
	Thompson Electrical Co., wiring office.....	18.30
	26. Dobbin-Ferrall Co., awnings.....	6.00
	29. Remington Typewriter Co., typewriter.....	81.00
Aug. 1.	Mabel Massey, salary.....	75.00
	2. Sophie D. Busbee, stenographic service.....	12.00
	9. Mamie C. Turner, stenographic service.....	9.50
	15. W. G. Briggs, Postmaster, postage.....	21.80
	News & Observer, one year book.....	2.00
	Green, Watson Art Shop, brass rods and brackets.....	4.20
	18. Office Stationery Co., office supplies.....	9.10
	21. Phil H. Andrews, postal guide.....	3.50
	25. J. E. Crayton & Co., shaving machine knife.....	2.50
	Mabel Massey, salary.....	75.00
	29. W. G. Briggs, Postmaster, postage.....	15.00
	30. Annie G. Root, salary.....	45.00
	Julia Pickel, clerical service.....	8.00
Sept. 6.	Mamie C. Turner, stenographic service.....	6.00
	9. W. G. Briggs, Postmaster, postal cards.....	5.00
	Julia Pickel, clerical services.....	1.00
	Jolly & Wynne Jewelry Co., clock.....	2.50
	Alderman Toy and China Co., waste basket.....	.75
	Southern Express Co., express.....	1.35
	18. W. G. Briggs, Postmaster, postage.....	50.00
	19. W. G. Briggs, Postmaster, postage.....	84.88
	20. W. G. Briggs, Postmaster, postal cards.....	10.00
	Virginia Pickel, clerical services.....	4.00
	22. News & Observer Publishing Co., year book.....	2.00
	W. G. Briggs, Postmaster, postage.....	40.00
	Henry Herring, salary.....	38.00
	Grace Crews, clerical services.....	1.00

Sept.	22.	Annie Jordan, clerical services.....	\$ 1.00
	23.	Hallie Fowler, clerical services.....	1.00
	25.	W. G. Briggs, Postmaster, postage.....	28.00
	26.	W. G. Briggs, Postmaster, postage.....	40.00
	24.	Mabel Massey, salary.....	75.00
	27.	Inez Reynolds, salary.....	45.00
		Daisy Barden, clerical services.....	2.50
		Edith Baker, clerical services.....	2.00
		Mrs. Sallie M. Taylor, clerical services.....	2.00
		Edwards & Broughton, one seal.....	15.00
		Dobbin-Ferrall Co., curtains.....	7.13
		Alfred Williams & Co., files.....	16.50
Oct.	4.	Carroll Adv. & Letterwriting Co., circular letters.....	19.85
		Henry Herring, traveling expenses.....	46.90
	6.	Alfred Williams & Co., office supplies.....	8.50
	8.	J. E. Mitchell, foot stools.....	1.00
		Office Stationery Co., office supplies.....	17.95
		Heller Bros. one bag.....	15.00
		Alderman Toy & China Co., baskets.....	1.25
		Royall & Borden Furniture Co., desk.....	14.00
		Raleigh Furniture Co., table.....	3.25
	9.	Mabel Massey, salary.....	25.00
		Mabel Massey, traveling expenses.....	42.31
		T. F. Brockwell, repairs.....	2.75
		Art Publishing Co., clerical services.....	7.00
	13.	Mamie C. Turner, stenographic services.....	23.30
	15.	Henry Herring, salary.....	60.00
	18.	W. G. Briggs, Postmaster, postage.....	25.00
	21.	David Jeffreys, drayage.....	1.00
		Thomas Nelson, stove.....	15.00
	31.	Mabel Massey, salary.....	100.00
	.	Inez Reynolds, salary.....	70.00
		Edith Baker, clerical services.....	18.50
		Daisy Barden, clerical services.....	20.00
		Sallie M. Taylor, clerical service.....	5.00
		Baker & Taylor Co., books.....	8.33
		Robert Turner, putting up stove.....	2.15
		Annie G. Root, clerical services.....	2.00
Nov.	1.	Aldert Root, salary.....	37.50
		W. R. Macy, chart.....	3.00
		Henry Herring, traveling expenses.....	81.20
	3.	W. G. Briggs, Postmaster, postage.....	150.00
	5.	W. G. Briggs, Postmaster, postage.....	30.00
		Frank B. Simpson, drawing.....	.50
	6.	W. G. Briggs, Postmaster, postage.....	30.00
	7.	Alfred Williams & Co., carbon paper.....	3.00
		Office Stationery Co., office supplies.....	23.50
		Mamie C. Turner, stenographic service.....	1.70
	8.	Western Union Telegraph Co., telegrams.....	3.34
		Thos. H. Briggs & Sons, stove board.....	1.00
		Dobbin & Ferrall Co., oil cloth.....	.56

Nov.	10.	W. G. Briggs, Postmaster, postal cards.....	\$ 30.00
		Carroll Adv. & Letterwriting Co.....	8.35
	11.	W. G. Briggs, Postmaster, postage.....	160.00
	13.	W. G. Briggs, Postmaster, postage.....	40.00
		Mrs. W. M. Duncan, clerical service.....	6.00
		Annie Owens, clerical service.....	2.00
		Eugene Jones, clerical service.....	1.50
	20.	Baker & Taylor Co., books.....	2.00
		Paul B. Crumpler, work on bell.....	.25
	21.	Mabel Massey, traveling expenses.....	16.20
	25.	Henry Herring, traveling expenses.....	77.70
	29.	Inez Reynolds, salary.....	70.00
		Edith Baker, salary.....	30.00
		T. Peyton Brown, salary.....	9.00
		Annie Root, clerical services.....	1.00
		Sallie M. Taylor, clerical services.....	3.50
		Annie B. Duncan, clerical services.....	7.00
		Etta Perry, clerical services.....	2.50
		Henrietta Owens, clerical services.....	15.00
		Lola Clapp, clerical services.....	2.00
		Emily Boyd, clerical services.....	6.00
		Mabel Massey, salary.....	100.00
Dec.	6.	Dr. Aldert Root, salary.....	25.00
		Henry Herring, expenses.....	38.40
		T. Peyton Brown, salary.....	15.00
	8.	W. G. Briggs, Postmaster, postage.....	115.00
		Annie Duncan, clerical service.....	.75
		Henry Holt & Co., books.....	1.67
		Royall & Borden Furniture Co., office furniture.....	38.50
	10.	W. G. Briggs, Postmaster, postage.....	100.78
		Southern Express Co., express.....	19.18
		Addressograph Co., plates.....	24.00
	11.	Alfred Williams & Co., supplies.....	33.50
		Western Union Telegraph Co., telegrams.....	1.16
		Mrs. Lillian Duncan, clerical service.....	9.00
		Lola Clapp, clerical service.....	2.00
		Margie Murchison, clerical service.....	1.00
		Mrs. Maidie Anderson, clerical service.....	1.00
		Office Stationery Co., supplies.....	4.25
		W. G. Briggs, Postmaster, postage.....	10.73
		Thos. H. Briggs & Sons, supplies.....	.95
		Office Stationery Co., supplies.....	4.40
	16.	Alderman Toy & China Co., waste basket.....	.75
		Mabel Massey, salary.....	100.00
		Inez Reynolds, salary.....	75.00
		Edith Baker, salary.....	30.00
	17.	Henry Herring, salary.....	65.00
	11.	Alderman Toy & China Co., bowl and pitcher.....	2.95
	20.	Henrietta Owens, clerical service.....	9.00
	22.	Western Union Telegraph Co., telegrams.....	1.16

Dec.	30.	W. G. Briggs, Postmaster, postage.....	\$ 126.48
		W. G. Briggs, Postmaster, postage.....	.40
31.		W. G. Briggs, Postmaster, postage.....	5.00
		Henry Herring, traveling expenses.....	88.03
<b>1914.</b>			
Jan.	1.	W. G. Briggs, Postmaster, postage.....	20.00
		Lillian Duncan, clerical service.....	3.00
		Thelma Owens, clerical service.....	2.50
		Henrietta Owens, clerical service.....	6.00
2.		W. G. Briggs, Postmaster, postage.....	35.00
		Thelma Owens, clerical service.....	1.00
3.		Mamie C. Turner, stenographic service.....	5.15
5.		Aldert S. Root, salary.....	25.00
6.		Office Stationery Co., supplies.....	3.55
7.		T. F. Brockwell, repairs.....	.50
		W. G. Briggs, Postmaster, postage.....	6.00
		Carroll Adv. & Letterwriting Co., stenographic service...	29.05
10.		Inez Reynolds, salary.....	25.00
12.		Southern Express Co., express.....	9.35
		Chas. E. Johnson, rent.....	10.00
13.		Mrs. J. H. Anderson, clerical service.....	2.00
		Eva Berry, clerical service.....	1.35
		Margie Murchison, clerical service.....	1.35
		Lola Clapp, clerical service.....	1.35
		Thelma Owens, clerical service.....	2.70
		Kittie Thomas, clerical service.....	3.50
		Hugh Heflin, clerical service.....	4.00
		Jessie Knight, clerical service.....	6.20
		Mrs. L. W. Blanton, clerical service.....	8.43
		Eliza Leach, clerical service.....	3.45
		Margaret Ellis, clerical service.....	1.35
		Mrs. J. H. Anderson, clerical service.....	3.38
14.		Mozelle Bailey, clerical service.....	.85
		Blanche Stockard, clerical service.....	2.40
		Minnie Batchelor, clerical service.....	3.50
		Mabel C. Robertson, clerical service.....	2.40
		Jessie Knight, clerical service.....	2.88
		Bessie Carroll, clerical service.....	.70
15.		Henry Herring, salary.....	65.00
		Inez Reynolds, stenographic service.....	6.65
		Lessie Matthews, clerical service.....	.70
		Frances Wilson, clerical service.....	3.08
		Katie Thomas, clerical service.....	1.58
		Helen Batchelor, clerical service.....	.70
		Athalea May, clerical service.....	4.68
		Louise Hall, clerical service.....	1.06
		Esther Allison, clerical service.....	2.34
		Nellie Poole, clerical service.....	3.30
		Lola Clapp, clerical service.....	.18
		Margie Murchison, clerical service.....	.71
		Thelma Owens, clerical service.....	.70

Jan.	15.	T. Peyton Brown, salary.....	\$ 25.00
		Edith Baker, salary.....	7.00
		W. G. Briggs, Postmaster, postage.....	10.50
	17.	W. G. Briggs, Postmaster, postage.....	33.00
		Thompson Electrical Co., supplies.....	1.55
		Mrs. L. W. Blanton, clerical work.....	4.00
	21.	Lucy Davis, clerical work.....	9.63
		Commercial Printing Co., printing.....	20.00
	24.	Lola Clapp, clerical work.....	1.81
	28.	W. G. Briggs, Postmaster, postage.....	58.62
	30.	W. R. Macy, charts.....	20.00
		Mabel Massey, salary.....	100.00
		Inez Reynolds, salary.....	50.00
		Athalea May, salary.....	30.00
		Henrietta Owens, salary.....	25.80
		Mrs. L. W. Blanton, salary.....	10.00
		Mrs. Maidie Anderson, clerical work.....	4.00
		Abbie Brown, clerical work.....	8.75
		Margaret Ellis, clerical work.....	3.00
		Dr. A. S. Root, salary.....	25.00
		C. E. Johnson, President, rent.....	10.00
		Henry Herring, traveling expenses.....	75.65
Feb.	3.	Office Stationery Co., supplies.....	19.35
		Western Union Telegraph Co., telegrams.....	1.01
		W. G. Briggs, Postmaster, postage.....	25.00
		E. R. Carroll, circular letters and stenographic work....	66.50
	5.	Mamie C. Turner, stenographic work.....	12.70
	7.	Jos. C. Ellington, mounting charts.....	.50
	9.	W. G. Briggs, Postmaster, postage.....	25.00
	11.	Bureau of Eng. & Education, multigraph work.....	102.03
	12.	Swindell-Barnes Co., rubber stamp.....	.50
	13.	Dr. J. R. Gordon, traveling expenses.....	49.45
		Dr. J. R. Gordon, salary.....	111.11
		News & Observer, year book.....	2.00
	14.	Dr. J. R. Gordon, salary.....	32.99
		Isaac Taylor, whitewashing.....	1.13
	16.	Eva Berry, clerical work.....	1.00
	6.	Mrs. Maidie S. Anderson, clerical work.....	1.00
	16.	P. W. Covington, salary.....	124.00
	18.	John Sanders, whitewashing.....	9.13
	19.	W. G. Briggs, Postmaster, postage.....	25.00
	20.	Seaton G. Turner, cleaning office.....	1.25
	21.	Dr. F. L. Watkins, traveling expenses and salary.....	156.28
		T. Peyton Brown, clerical work.....	6.00
	25.	W. G. Briggs, Postmaster, postage.....	42.00
	21.	Margie Murchison, clerical work.....	2.00
	26.	W. T. Terry, rubber stamps.....	.60
	27.	P. W. Covington, salary.....	208.67
		Dr. J. R. Gordon, traveling expenses.....	31.85
		Athalea May, salary.....	30.00
		Henry Herring, traveling expenses.....	104.80

Feb.	28.	W. G. Briggs, Postmaster, postage.....	\$ 21.00
		Lucy Davis, clerical work.....	2.62
		T. Peyton Brown, salary.....	63.50
		Mabel Massey, salary.....	100.00
		Henry Herring, salary.....	65.00
		Thelma Owens, clerical work.....	1.50
		Mrs. Maidie S. Anderson, clerical work.....	1.50
		Dr. J. R. Gordon, salary.....	208.33
		Henrietta Owens, salary.....	30.00
		Athalea May, salary.....	5.00
		Inez Reynolds, salary.....	75.00
		Nannie Conn, salary.....	30.00
Mar.	2.	Carroll Adv. & Letterwriting Co., circular letters.....	17.20
		W. G. Briggs, Postmaster, postage.....	6.00
	3.	Western Union Telegraph Co., telegrams.....	1.03
	28.	Southern Express Co., express.....	1.04
	9.	Dr. A. S. Root, salary.....	25.00
		W. G. Briggs, Postmaster, postage.....	31.00
	10.	Thos. H. Briggs & Sons, supplies.....	4.65
		Ellen King, clerical work.....	2.00
		C. E. Johnson, President, rent.....	10.00
		Abbie Brown, clerical service.....	1.00
		T. Peyton Brown, cash advanced.....	2.50
	11.	James E. Thiem, supplies.....	2.45
		W. G. Briggs, Postmaster, postage.....	28.00
	12.	Bureau of County Health Work, postage.....	2.44
	14.	Bertha Wiggs, salary.....	27.50
		T. Peyton Brown, salary.....	62.50
		Lawrence O'Keefe, salary.....	3.00
	18.	W. G. Briggs, Postmaster, postage.....	25.00
		Mrs. Lillian Duncan, clerical work.....	.50
		Inez Reynolds, salary.....	40.00
		Margaret Ellis, clerical work.....	5.15
		Lenna Upchurch, clerical work.....	.50
	19.	Mrs. Maidie S. Anderson, clerical work.....	15.50
		Southern Railway Co., freight.....	7.04
		W. G. Briggs, Postmaster, postage.....	10.00
	20.	W. G. Briggs, Postmaster, postage.....	20.00
	24.	W. G. Briggs, Postmaster, postage.....	20.00
	25.	W. G. Briggs, Postmaster, postage.....	10.00
	26.	Remington Typewriter Co., typewriter ribbon.....	.75
	27.	Lawrence O'Keefe, salary.....	5.50
	28.	Dr. J. R. Gordon, salary.....	208.33
		W. G. Briggs, Postmaster, postage.....	20.00
		Mrs. W. H. Gilbert, clerical work.....	9.00
		Vivian P. Betts, clerical work.....	1.00
		Mabel Hawkins, clerical work.....	12.00
		W. G. Briggs, Postmaster, postage.....	10.00
		Thelma Owens, clerical work.....	.50
	31.	W. G. Briggs, Postmaster, postage.....	20.00

Mar.	30.	T. Peyton Brown, salary.....	\$ 62.50
		Sara Allen, salary.....	22.00
		Bertha Wiggs, salary.....	27.50
		Inez Reynolds, salary.....	35.00
		Athalea May, salary.....	35.00
		Henrietta Owens, salary.....	30.00
		Athalea May, extra work.....	5.75
		Bertha Wiggs, extra work.....	3.66
		Helen Batchelor, salary.....	13.00
		Henry Herring, salary.....	65.00
		A. S. Root, salary.....	25.00
31.		Bureau of County Health, postage.....	1.88
		Sorrell & Smith, drayage.....	1.00
Apr.	1.	Freight Agent, S. A. L., freight.....	7.56
		Helen Batchelor, clerical work.....	3.54
	2.	Henry Herring, traveling expenses.....	142.55
	3.	Royall & Borden Co., office furniture.....	77.00
		Swindell-Barnes Co., rubber stamps.....	.95
	4.	Office Stationery Co., supplies.....	19.70
		Mrs. W. H. Gilbert, clerical work.....	5.75
		Mabel Hawkins, clerical work.....	5.78
		Tabulating Machine Co., machines.....	130.24
	7.	Mamie Turner, stenographic work.....	4.20
		J. R. Gordon, traveling expenses.....	13.68
		Petty cash.....	10.00
	8.	C. E. Johnson, President, rent.....	10.00
		W. G. Briggs, Postmaster, postage.....	20.00
	10.	Inez Reynolds, salary.....	37.50
	11.	W. G. Briggs, Postmaster, postage.....	10.00
		T. Peyton Brown, salary.....	62.50
	14.	W. G. Briggs, Postmaster, postage.....	30.00
	15.	Carroll Adv. & Letterwriting Co., circular letters.....	4.50
		Bertha Wiggs, salary.....	30.00
	20.	W. G. Briggs, Postmaster, postage.....	45.00
	21.	W. G. Briggs, Postmaster, postage.....	10.00
	22.	W. G. Briggs, Postmaster, postage.....	20.00
	24.	Mrs. H. E. Cole, clerical work.....	1.50
		Alfred Williams & Co., index.....	7.00
	25.	Mrs. W. H. Gilbert, clerical work.....	7.57
		Eloise Guthrie, clerical work.....	1.50
		Ruth Wiggs, clerical work.....	1.20
	27.	Remington Typewriter Co., supplies.....	1.50
		W. G. Briggs, Postmaster, postage.....	25.00
	30.	Dr. J. R. Gordon, salary.....	208.33
		T. Peyton Brown, salary.....	62.50
		Dr. A. S. Root, salary.....	25.00
		C. E. Johnson, rent.....	10.00
		Bertha Wiggs, salary.....	30.00
		Sara G. Allen, salary.....	55.00
		Grayce Reynolds, salary.....	25.95
		Athalea May, salary.....	40.00

Apr.	30.	Helen Batchelor, salary.....	\$ 35.00
		Henrietta Owens, salary.....	35.00
		Henry Herring, salary.....	65.00
		Mabel Hawkins, clerical work.....	2.75
		Minnie Batchelor, clerical work.....	.35
May	2.	Dr. J. R. Gordon, traveling expenses.....	72.16
	1.	Henry Herring, traveling expenses.....	124.73
	5.	Walter Murphy, legal fees.....	20.00
		Office Stationery Co., office supplies.....	8.20
		Southern Express Co., express.....	1.10
		W. G. Briggs, Postmaster, postage.....	45.00
	7.	P. W. Covington, salary.....	208.33
	8.	Carolina Power & Light Co., lamps.....	1.55
	9.	W. G. Briggs, Postmaster, postage.....	40.00
	14.	W. G. Briggs, Postmaster, postage.....	20.00
	15.	Underwood Typewriter Co., rubber keys.....	3.50
		Alfred Williams & Co., furniture and supplies.....	19.55
		T. Peyton Brown, salary.....	62.50
		Bertha Wiggs, salary.....	31.32
		Helen Batchelor, extra work.....	2.10
		Athalea May, extra work.....	1.75
		Sara Grace Allen, extra work.....	1.20
		Grayce Reynolds, extra work.....	2.75
		Henrietta Owens, extra work.....	1.90
		Dr. J. R. Gordon, traveling expenses.....	22.65
	18.	Johnson & Johnson, ice.....	5.50
	20.	W. G. Briggs, Postmaster, postage.....	1.74
	21.	W. G. Briggs, Postmaster, postage.....	35.00
	23.	W. G. Briggs, Postmaster, postage.....	10.00
		Mrs. W. H. Gilbert, salary.....	12.00
	27.	Elizabeth Keel, salary.....	21.06
	29.	W. G. Briggs, Postmaster, postage.....	40.00
	28.	Dr. J. R. Gordon, salary.....	208.33
		T. Peyton Brown, salary.....	62.50
	30.	Grayce Reynolds, salary.....	60.00
		Sara Grace Allen, salary.....	60.00
		Helen Batchelor, salary.....	40.00
		Henrietta Owens, salary.....	35.00
		Dr. A. S. Root, salary.....	25.00
		P. W. Covington, salary.....	208.33
		Henry Herring, salary.....	65.00
		C. E. Johnson, President, rent.....	10.00
		Athalea May, salary.....	50.00
June	1.	Lucas Brothers, supplies.....	27.50
		Henry Herring, traveling expenses.....	148.70
		Edna Reynolds, clerical work.....	1.50
	2.	Dr. J. R. Gordon, traveling expenses.....	16.71
		Remington Typewriter Co., ribbons.....	1.50
		Southern Express Co., express.....	3.30
		James E. Thiem, office supplies.....	8.25
	3.	Remington Typewriter Co., typewriter ribbons.....	7.00

June	3.	Western Union Telegraph Co., telegrams.....	\$ 1.00
		Helen Batchelor, salary.....	12.60
	4.	Ada Rogerson, stenographic work.....	1.67
	5.	W. G. Briggs, Postmaster, postage.....	40.00
	6.	Henrietta Owens, salary.....	5.80
	10.	Carolina Power & Light Co., electric fan.....	19.65
		W. G. Briggs, Postmaster, postage.....	70.00
	11.	W. G. Briggs, Postmaster, postage.....	10.00
		Alfred Williams & Co., office supplies.....	2.70
	13.	T. Peyton Brown, salary.....	75.00
	17.	Julia Pickell, salary.....	2.51
		W. G. Briggs, Postmaster, envelopes.....	126.08
	23.	W. G. Briggs, Postmaster, postage.....	30.00
	25.	Underwood Typewriter Co., typewriter.....	83.03
	30.	Ruth A. Robinson, salary.....	33.33
		J. R. Gordon, salary.....	208.33
		T. Peyton Brown, salary.....	75.00
		Sara G. Allen, salary.....	60.00
		Grayce Reynolds, salary.....	60.00
		Helen Batchelor, salary.....	40.00
		Dr. A. S. Root, salary.....	25.00
		Athalea May, salary.....	50.00
		Mrs. W. H. Gilbert, salary.....	39.00
		C. E. Johnson, rent.....	10.00
	29.	W. G. Briggs, Postmaster, postage.....	50.00
	30.	Howard Gordon, salary.....	15.00
		J. R. Gordon, traveling expenses.....	6.60
July	3.	F. O. Carver, legal fees.....	10.00
		T. Peyton Brown, traveling expenses.....	8.00
		Alfred Williams & Co., office supplies.....	1.40
		James E. Thiem, office supplies.....	6.80
	8.	W. G. Briggs, Postmaster, postage.....	50.00
	13.	T. Peyton Brown, traveling expenses.....	20.00
		W. G. Briggs, Postmaster, postage.....	30.00
	15.	T. Peyton Brown, salary.....	150.00
		Dr. J. R. Gordon, salary.....	100.00
		Sara G. Allen, salary.....	30.00
		Athalea May, salary.....	25.00
	20.	W. G. Briggs, Postmaster, postage.....	40.00
		Ruth A. Robinson, salary.....	25.00
	29.	T. Peyton Brown, traveling expenses.....	46.61
	30.	W. G. Briggs, Postmaster, postage.....	20.00
		Dr. J. R. Gordon, traveling expenses.....	9.40
		Dr. J. R. Gordon, salary.....	108.34
		Dr. W. S. Rankin, salary.....	50.00
	31.	Sara G. Allen, salary.....	30.00
		Grayce Reynolds, salary.....	60.00
		Helen Batchelor, salary.....	40.00
		Athalea May, salary.....	25.00
		Ruth A. Robinson, salary.....	25.00
		Mrs. W. H. Gilbert, salary.....	35.50

July	31.	Howard Gordon, salary.....	\$ 30.00
		C. E. Johnson, President, rent.....	10.00
		Petty cash .....	10.00
		E. M. Uzzell & Co., cutting cards.....	2.50
Aug.	3.	S. M. Hobby, moving.....	35.00
	5.	Office Stationery Co., office supplies.....	7.45
		W. G. Briggs, Postmaster, postage.....	50.00
		Will Bridges, labor.....	6.75
	7.	Petty cash .....	10.00
		Johnson & Johnson, ice.....	2.00
	10.	W. G. Briggs, Postmaster, postage.....	10.00
	11.	W. G. Briggs, Postmaster, postage.....	100.00
	13.	W. G. Briggs, Postmaster, postage.....	75.00
	14.	T. Peyton Brown, salary.....	75.00
		Grayce Reynolds, salary.....	60.00
		J. D. Humphrey, legal fees.....	10.00
		John T. Brittain, legal fees.....	10.00
	17.	J. R. Gordon, traveling expenses.....	32.41
	20.	Mrs. T. Peyton Brown, stenographic work.....	15.00
	21.	T. Peyton Brown, traveling expenses.....	15.00
	27.	W. G. Briggs, Postmaster, postage.....	60.00
		Jos. B. Thorpe, indexing.....	213.60
	29.	J. R. Gordon, salary.....	208.34
		T. P. Brown, salary.....	75.00
	31.	Helen Batchelor, salary.....	45.00
		Athalea May, salary.....	50.00
		Mrs. Helen Gilbert, salary.....	35.00
		Estelle Wiggs, salary.....	26.91
		Nettie Anderson, salary.....	22.23
		Floy N. Ray, salary.....	23.40
		Howard Gordon, salary.....	24.00
		Ruth A. Robinson, salary.....	60.00
		William Hicks, salary.....	10.00
		W. S. Rankin, salary.....	50.00
		The Raleigh Times, subscription.....	5.00
		Thos. H. Briggs & Sons, supplies.....	2.10
		Remington Typewriter Co., typewriter.....	25.00
Sept.	1.	Thompson Electrical Co., installing lights.....	16.65
		Office Stationery Co., office supplies.....	22.75
		Floy Ray, clerical work.....	2.20
	2.	W. G. Briggs, Postmaster, postage.....	14.50
	3.	Mrs. T. Peyton Brown, extra work.....	6.61
		Thompson Electrical Co., batteries.....	1.00
	4.	Alfred Williams & Co., office supplies.....	10.50
	3.	W. G. Briggs, Postmaster, postage.....	50.00
	4.	Lucas Bros., book cases.....	93.00
		Southern Bell Telephone & Telegraph Co., telephone....	7.05
	5.	W. G. Briggs, Postmaster, postage.....	60.00
		Blanche Baugh, clerical work.....	3.00
	8.	News & Observer, subscription.....	7.00
	9.	Flora Creech, copying certificates.....	2.18

Sept.	12.	Mrs. T. Peyton Brown, stenographic work.....	\$ 11.50
		J. R. Gordon, traveling expenses.....	16.51
		Ruth A. Robinson, salary.....	60.00
		T. Peyton Brown, extra work.....	30.00
15.		T. Peyton Brown, salary.....	75.00
		Dr. J. R. Gordon, salary.....	101.67
		Howard Gordon, salary.....	5.00
		Blanche Stockard, salary.....	30.00
		Grayce Reynolds, salary.....	30.00
		Johnson & Johnson, ice.....	5.00
17.		Flora Creech, copying certificates.....	1.71
		W. G. Briggs, Postmaster, postage.....	50.00
		W. G. Briggs, Postmaster, postage.....	10.00
19.		Nettie Anderson, salary.....	19.00
21.		Nettie Anderson, copying certificates.....	5.25
22.		T. Peyton Brown, extra work.....	19.00
		Mary Teachey, copying certificates.....	3.12
		J. B. Lyon Co., postal guide.....	3.50
23.		Emily H. Walker, copying certificates.....	5.00
		Myrtle Smith, clerical work.....	8.61
		Elizabeth Uzzle, clerical work.....	6.50
28.		Bureau of Vital Statistics, petty cash.....	10.00
		J. R. Gordon, traveling expenses.....	15.77
		Bertha W. Brown, work on transcripts.....	11.75
29.		W. G. Briggs, Postmaster, postage.....	20.00
		J. R. Gordon, salary.....	106.67
		T. Peyton Brown, salary.....	75.00
30.		W. S. Rankin, salary.....	50.00
		Grace Reynolds, salary.....	32.40
		Ruth Robinson, copying certificates.....	4.81
		Elsie Yates, copying certificates.....	14.65
		Honorine Banks, salary.....	23.50
		Myrtle Mitchell, salary.....	21.50
		Helen Batchelor, salary.....	58.25
		Athalea May, salary.....	56.72
		Estelle Wiggs, salary.....	40.00
		Mrs. W. H. Gilbert, salary.....	35.83
		Merle Ellington, salary.....	10.00
		Blanche Stockard, salary.....	32.15
		Annie L. Ervin, salary.....	12.50
		Mrs. L. W. Blanton, copying certificates.....	49.41
		William Hicks, salary.....	10.00
Oct.	2.	Joseph B. Thorpe, indexing.....	132.59
		James E. Thiem, office supplies.....	23.30
	*	Carroll Adv. & Letterwriting Co., circular letters.....	25.65
		Lucas Bros., office supplies.....	11.04
		Royall & Borden Furniture Co., office furniture.....	192.50
3.		W. G. Briggs, Postmaster, postage.....	50.00
		J. C. Ellington, framing maps.....	2.25
		Southern Express Co., express.....	1.43
6.		W. G. Briggs, Postmaster, postage.....	30.00

Oct.	9.	Narcissa Hutchins, salary.....	\$ 9.50
		Annie L. Ervin, salary.....	7.00
		Elsie Yates, copying certificates.....	9.37
10.		W. G. Briggs, Postmaster, postage.....	25.00
		T. P. Brown, salary.....	50.00
12.		Macy & Lawler, lettering doors.....	7.00
		Southern Bell Telephone & Telegraph Co., telephone.....	1.50
14.		Tabulating Machine Co., cards.....	20.00
		T. Peyton Brown, salary.....	25.00
		Honorine Banks, salary.....	24.00
		Frances C. Park, salary.....	28.00
		Myrtle Mitchell, salary.....	.24.00
15.		Blanche Stockard, salary.....	30.00
14.		Ruth A. Robinson, salary.....	30.00
15.		Grayce Reynolds, salary.....	30.00
		Merle Ellington, salary.....	12.00
		J. R. Gordon, traveling expenses and salary.....	133.77
		Mrs. L. W. Blanton, tabulating work.....	15.75
		Mary Robinson, tabulating work.....	19.98
16.		W. G. Briggs, Postmaster, postage.....	5.00
17.		W. G. Briggs, Postmaster, postage.....	90.00
21.		Carolina Blue Printers, prints.....	2.93
23.		Mrs. T. P. Brown, work on transcripts.....	20.70
24.		Edwards & Broughton Co., printing.....	2.70
27.		W. G. Briggs, Postmaster, postage.....	110.00
		J. C. Ellington, frame.....	1.25
31.		T. P. Brown, salary.....	75.00
		Estelle Wiggs, salary.....	40.00
		Athalea May, salary.....	50.00
		Blanche Stockard, salary.....	30.00
		Ruth A. Robinson, salary.....	30.00
		Grayce Reynolds, salary.....	30.00
		Mrs. Helen Gilbert, salary.....	40.00
		Helen Batchelor, salary.....	54.00
		Myrtle Mitchell, salary.....	14.00
		Margaret Ellis, salary.....	30.00
		Annie L. Ervin, salary.....	8.00
		Merle Ellington, salary.....	12.00
		Mrs. Haywood D. White, copying certificates.....	20.66
		Miss Narcissa Hutchins, salary.....	11.00
		W. G. Briggs, Postmaster, postage.....	40.00
		Southern Railway Co., freight.....	11.56
		J. R. Gordon, salary.....	104.16
		W. S. Rankin, salary.....	50.00
		J. R. Gordon, traveling expenses.....	24.71
		News & Observer Publishing Co., advertisement.....	.90
		Jos. B. Thorpe, indexing.....	144.43
		S. M. Hobby, drayage.....	5.00
Nov.	2.	Derby & Orrell, staining shelves.....	7.00
		Carroll Adv. & Letterwriting Co., multigraphing.....	12.00
		W. G. Briggs, Postmaster, postage.....	5.00

Nov.	2.	Office Stationery Co., office supplies.....	\$ 16.30
		Essie King, salary.....	3.50
	3.	H. S. Storr & Co., carbon paper.....	4.50
		Dobbin-Ferrall Co., curtains.....	18.50
		Royall & Borden Co., office furniture.....	74.90
	5.	Southern Railway Co., freight.....	2.28
		E. H. Plummer, legal fees.....	10.20
		W. G. Briggs, Postmaster, postage.....	150.00
	6.	Western Union Telegraph Co., telegrams.....	1.83
		J. C. Ellington, framing map.....	4.50
		W. B. Barrow, shelves.....	74.00
		Mrs. T. Peyton Brown, stenographic work.....	17.25
	7.	Tabulating Machine Co., motor generator.....	128.35
		Tabulating Machine Co., cards.....	20.00
	12.	W. G. Briggs, Postmaster, postage.....	10.00
		W. G. Briggs, Postmaster, postage.....	50.00
		Southern Bell Telephone & Telegraph Co., telephone.....	1.50
	13.	T. P. Brown, salary.....	75.00
	14.	J. R. Gordon, salary.....	104.17
		Grayce Reynolds, salary.....	30.00
		Ruth A. Robinson, salary.....	30.00
		Blanche Stockard, salary.....	30.00
		Athalea May, salary.....	25.00
		Frances C. Park, salary.....	11.00
		Mrs. Helen Gilbert, salary.....	22.50
		Merle Ellington, salary.....	12.00
		Narcissa Hutchins, salary.....	12.00
		Mrs. Bertha Brown, extra work.....	5.75
		Helen Batchelor, salary.....	30.00
		Annie L. Ervin, salary.....	12.00
		Scott Paper Co., towel holder.....	.75
		Dobbin-Ferrall Co., curtain rods.....	1.45
	17.	W. G. Briggs, Postmaster, postage.....	2.50
		Hobby's Tranfer Co., drayage.....	3.00
	18.	W. G. Briggs, Postmaster, postage.....	70.00
		Seaboard Air Line Railway, mileage book.....	20.00
	19.	T. Peyton Brown, traveling expenses.....	10.00
	21.	Carroll Adv. & Letterwriting Co., multigraph.....	215.00
	24.	W. G. Briggs, Postmaster, postage.....	20.00
		R. I. Poole, making maps.....	6.90
	28.	J. R. Gordon, salary.....	104.16
		T. Peyton Brown, salary.....	75.00
	30.	Grayce Reynolds, salary.....	30.00
		Ruth A. Robinson, salary.....	30.00
		Blanche Stockard, salary.....	30.00
		Mrs. W. H. Gilbert, salary.....	17.50
		Athalea May, salary.....	25.00
		Estelle Wiggs, salary.....	40.00
		Helen Batchelor, salary.....	26.00
		Myrtle Mitchell, tabulating work.....	30.00
		Margaret Ellis, tabulating work.....	30.00

Nov. 30.	Merle Ellington, salary.....	\$ 12.00
	Narcissa Hutchins, salary.....	13.00
	Miss Utley, salary.....	22.00
	Frances C. Park, salary.....	13.00
	Annie L. Ervin, salary.....	25.00
	Lillian Banks, salary.....	18.00
	Seaboard Air Line Railway, mileage book.....	20.00
	W. G. Briggs, Postmaster, postage.....	100.00
	Jos. B. Thorpe, indexing.....	141.14
	T. Peyton Brown, traveling expenses.....	30.00

## 1912.

## RECEIPTS.

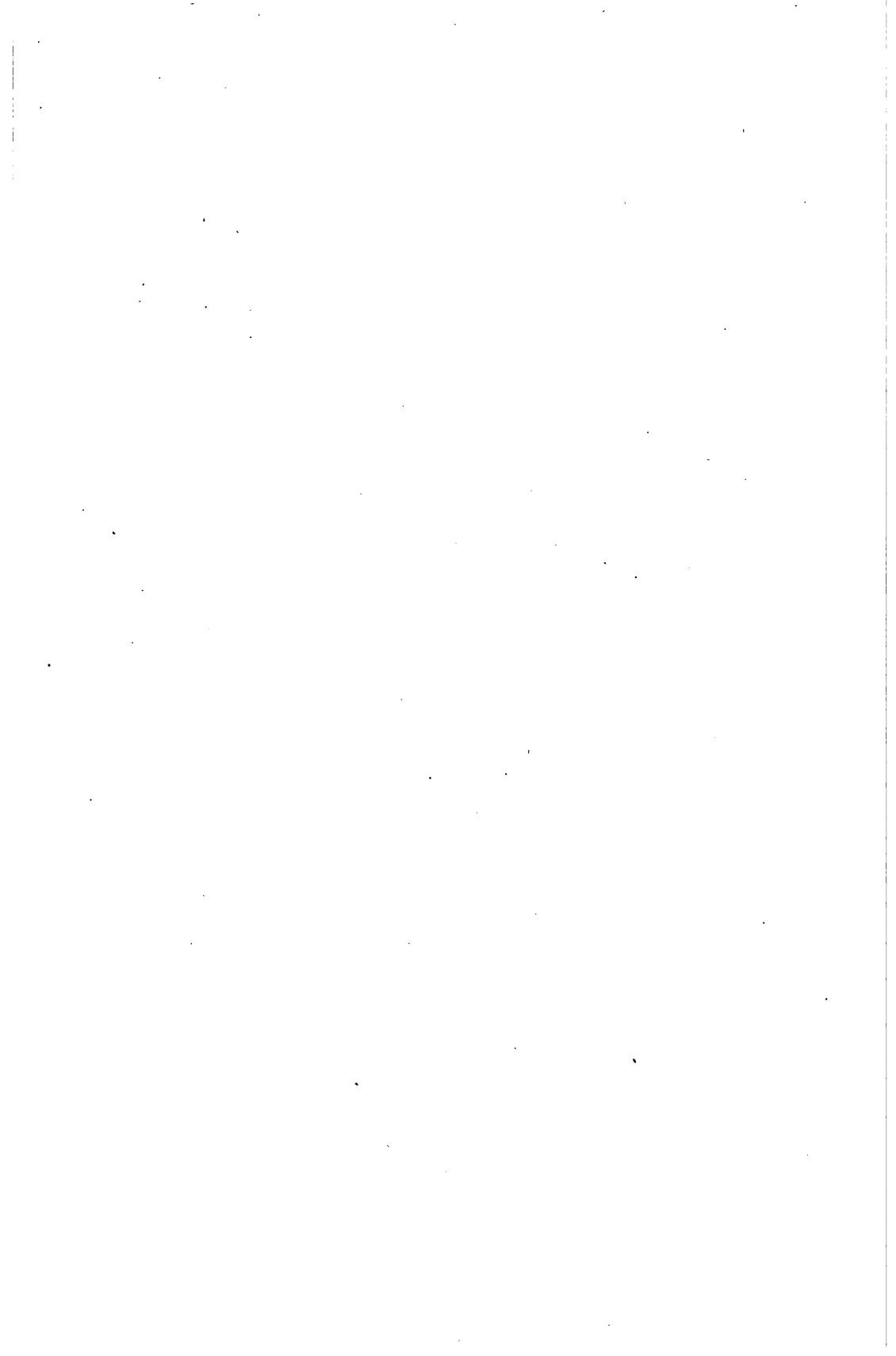
Dec. 1.	Balance State Registrar fund.....	140.65
13.	Bureau of the Census.....	17.52

## 1913.

Mar. 26.	Bureau of the Census.....	84.42
July 3.	State Treasurer, appropriation.....	500.00
Sept. 18.	State Treasurer, appropriation.....	500.00
27.	Bureau of the Census.....	64.14
Oct. 7.	State Treasurer, appropriation.....	1,000.00
Nov. 12.	State Treasurer, appropriation.....	2,166.66
18.	State Treasurer, appropriation.....	5,833.34
29.	Bureau of the Census.....	18.33
Dec. 31.	Fees .....	2.00

## 1914.

Jan. 31.	Bureau of the Census.....	96.06
31.	Fees .....	.50
Feb. 28.	Fees .....	2.00
	Hookworm Commission, postage.....	8.13
Mar. 31.	Bureau of the Census.....	18.81
	Fees .....	1.50
Apr. 30.	Bureau of the Census.....	3.36
	Fees .....	2.50
May 31.	Fees .....	.50
June 17.	State Treasurer, appropriation.....	2,000.00
30.	Fees .....	2.50
July 30.	State Treasurer, appropriation.....	2,000.00
31.	Fees .....	4.00
Aug. 28.	Bureau of Accounting, traveling expenses advanced.....	4.20
31.	Fees .....	2.00
Sept. 8.	State Treasurer, appropriation.....	2,000.00
30.	Fees .....	2.00
Oct. 31.	Fees .....	.50
Nov. 7.	State Treasurer, appropriation.....	2,000.00
25.	State Treasurer, appropriation.....	2,000.00
28.	T. P. Brown, refund on traveling expenses.....	3.85
30.	Bureau of the Census.....	182.94
	Fees .....	.50



## **TABULATED VITAL STATISTICS**

TABLE I.—DEATHS (EXCLUSIVE OF STILLBIRTHS) BY SEX, CONJUGAL CONDITION  
LATION, FOR 1913.

Town	Race	Total	Sex		Conjugal Condition				
			Male	Female	Single	Married	Widowed	Divorced	Unknown
Total.....	White...	3,584	1,847	1,737	1,708	1,256	588	9	23
	Colored...	3,191	1,569	1,622	1,741	1,008	390	10	42
1. Albemarle.....	White...	26	17	9	20	5			1
	Colored...	1	1		1				
2. Asheville.....	White...	289	156	133	121	125	38	2	3
	Colored...	139	69	70	78	43	17	1	
3. Beaufort.....	White...	21	12	9	10	4	6		1
	Colored...	18	9	9	8	6	2		2
4. Bessemer City.....	White...	15	7	8	9	4	2		
	Colored...								
5. Burlington.....	White...	54	27	27	31	16	7		
	Colored...	14	19	5	10	4			
6. Chapel Hill.....	White...	9	5	4	3	4	2		
	Colored...	9	1	8	6	1	2		
7. Charlotte.....	White...	338	180	158	173	111	52	1	1
	Colored...	265	120	145	140	81	42	1	1
8. Cherryville.....	White...	14	9	5	9	1	4		
	Colored...								
9. Concord.....	White...	92	45	47	49	27	16		
	Colored...	46	24	22	34	8	4		
10. Dunn.....	White...	13	7	6	5	6	2		
	Colored...	9	4	5	5	4			
11. Durham.....	White...	124	53	71	58	40	23	1	2
	Colored...	187	80	87	109	44	14		
12. Edenton.....	White...	9	3	6	2	6			1
	Colored...	23	10	13	10	6	1		6
13. Elisabeth City.....	White...	47	21	26	17	18	11		1
	Colored...	85	39	46	52	22	10	1	
14. Fayetteville.....	White...	104	51	53	39	45	19		1
	Colored...	80	34	46	41	22	12		5
15. Forest City.....	White...	22	14	8	13	9			
	Colored...	2	1	1	2				
16. Gastonia.....	White...	111	49	62	65	30	16		
	Colored...	35	16	19	21	10	3		

<sup>11</sup> Unknown race.

## FIFTEENTH BIENNIAL REPORT

273

GENERAL NATIVITY AND NATIVITY OF PARENTS, FOR TOWNS OF OVER 1,000 POPU-  
BY RACES

Nativity				Nativity of Parents					
North Carolina	United States	Foreign	Unknown	Both Parents				Mixed Parentage	
				North Carolina	United States	Foreign	Unknown		
2,972	464	73	75	2,216	348	93	302	297	328
2,723	352	1	115	1,833	302	1	451	216	388
24	1	-----	1	23	-----	-----	-----	3	-----
1	-----	-----	-----	1	-----	-----	-----	-----	-----
133	132	17	7	94	106	25	18	27	19
99	36	-----	4	56	34	-----	10	19	20
18	1	1	1	14	1	1	1	1	3
18	-----	-----	-----	13	-----	-----	4	1	-----
14	1	-----	-----	9	1	-----	1	3	1
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
51	1	-----	2	40	1	-----	5	3	5
113	1	-----	-----	13	-----	-----	1	-----	-----
9	-----	-----	-----	7	-----	-----	-----	1	1
9	-----	-----	-----	8	-----	-----	-----	-----	1
266	58	11	3	178	45	13	30	34	38
185	72	-----	8	101	64	-----	44	24	32
14	-----	-----	-----	11	-----	-----	-----	-----	3
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
89	1	2	-----	71	1	-----	8	5	7
44	2	-----	-----	30	2	-----	2	5	7
12	1	-----	-----	11	1	-----	-----	-----	1
9	-----	-----	-----	9	-----	-----	-----	-----	-----
108	11	2	3	78	6	5	10	11	14
158	8	-----	1	102	7	-----	23	12	23
7	2	-----	-----	7	1	-----	-----	-----	1
21	1	-----	1	13	-----	-----	4	1	5
42	5	-----	-----	31	3	1	-----	5	7
83	2	-----	-----	74	-----	-----	2	3	6
83	12	2	7	66	8	-----	20	4	6
60	5	-----	15	50	4	-----	15	1	10
19	2	-----	1	13	1	-----	4	2	2
2	-----	-----	-----	-----	-----	-----	-----	1	1
98	13	-----	-----	71	3	-----	2	25	10
23	12	-----	-----	5	15	-----	2	7	6

TABLE I.—DEATHS (EXCLUSIVE)

Town	Race	Total	Sex		Conjugal Condition				Unknown
			Male	Female	Single	Married	Widowed	Divorced	
17. Goldsboro.....{	White...	69	33	36	28	30	11	-----	1
	Colored..	104	42	62	49	39	15	-----	
18. Graham.....{	White...	20	12	8	16	1	3	-----	2
	Colored..	8	5	3	4	2	2	-----	
19. Greensboro.....{	White...	173	92	81	74	73	26	-----	23
	Colored..	140	70	70	85	32	23	-----	
20. Greenville.....{	White...	25	7	18	18	5	2	-----	1
	Colored..	40	17	23	18	19	2	-----	
21. Henderson.....{	White...	29	14	15	10	9	8	2	3
	Colored..	50	28	22	30	17	3	-----	
22. Hendersonville.....{	White...	40	26	14	20	17	3	-----	2
	Colored..	25	13	12	17	6	2	-----	
23. Hertford.....{	White...	2	-----	2	1	-----	1	-----	2
	Colored..	15	10	5	4	9	2	-----	
24. Hickory.....{	White...	25	14	11	11	9	4	-----	1
	Colored..	7	3	4	3	3	1	-----	
25. High Point.....{	White...	125	52	73	69	42	14	-----	1
	Colored..	80	27	33	30	17	12	-----	
26. Kings Mountain...{	White...	31	14	17	19	7	5	-----	1
	Colored..	4	3	1	2	1	1	-----	
27. Kinston.....{	White...	56	28	28	31	16	8	-----	4
	Colored..	54	30	24	30	14	6	-----	
28. Laurinburg.....{	White...	13	9	4	7	3	3	-----	1
	Colored..	11	5	6	4	7	-----	-----	
29. Lenoir.....{	White...	37	24	13	15	21	1	-----	1
	Colored..	6	3	3	2	2	1	-----	
30. Lexington.....{	White...	29	16	13	12	13	2	1	2
	Colored..	15	8	7	4	4	5	-----	
31. Louisburg.....{	White...	6	3	3	3	2	1	-----	1
	Colored..	18	10	8	9	8	1	-----	
32. McAdenville.....{	White...	24	9	15	12	5	6	1	1
	Colored..	1	-----	1	-----	-----	1	-----	
33. Marion.....{	White...	14	7	7	8	5	1	-----	1
	Colored..	-----	-----	-----	-----	-----	-----	-----	

†1 Unknown race.

††4 Unknown race.

\*2 Unknown race.

††3 Unknown race.

\*\*1 Unknown sex.

## FIFTEENTH BIENNIAL REPORT

275

OF STILLBIRTHS)—Continued.

North Carolina	Nativity			Nativity of Parents				Mixed Parentage
	United States	Foreign	Unknown	Both Parents			North Carolina, United States	N. C., or U. S., Foreign or Unknown
				North Carolina	United States	Foreign		
64	3	1	1	45	5	11	3	5
96	3	5		68	2	15	2	17
20				16			2	2
8				7				1
147	20	4	2	100	16	3	17	23
129	8	3		85	7	21	5	22
22	2	1		18	1	1	3	1
138		2		130		8	1	1
27	1	1		23	1	1	2	1
142	4	4		132	4	4	5	5
24	15	1		17	12	2	4	2
13	11	1		6	8		5	3
2				2				
12	1	2		10	1	3		1
22	2	1		15	3	1	4	2
6	1			5		1		1
113	8	1	3	101	8	1	4	6
51	8	1		† 32	7		5	7
26	5			22	2		5	2
2	1	1		1	1	2		
† 54	1	1		46	2	1	1	6
50	1	3		† 34	1	1	2	8
11	2			8	1	1	2	1
9	2			9	2			
34	1	2		29	1	2	2	3
6				3		2	1	
24	2	3		19	1	5		4
11	2	2		7	1	5		2
5	1			4	1	1		
18				13		1	1	3
23	1			16	1		4	3
1				1				
11	3			9	1	1		3

TABLE I.—DEATHS (EXCLUSIVE)

Town	Race	Total	Sex		Conjugal Condition				Unknown
			Male	Female	Single	Married	Widowed	Divorced	
34. Monroe-----{	White...	28	21	7	8	15	5		
	Colored...	32	18	14	18	11	3		
35. Mooresville-----{	White...	27	15	12	15	11	1		
	Colored...	11	8	3	4	5	2		
36. Morehead City-----{	White...	22	10	12	13	7	2		
	Colored...	7	3	4	4	3			
37. Morganton-----{	White...	23	8	15	6	14	3		
	Colored...	10	6	4	5	5			
38. Mount Airy-----{	White...	72	35	37	43	20	9		
	Colored...	19	6	13	10	7	2		
39. New Bern-----{	White...	72	50	22	36	25	11		
	Colored...	187	97	70	91	57	19		
40. Newton-----{	White...	29	8	21	18	5	6		
	Colored...	12	7	5	9	3			
41. Oxford-----{	White...	22	15	7	9	10	3		
	Colored...	15	8	7	7	8			
42. Plymouth-----{	White...	18	8	10	6	7	5		
	Colored...	25	16	9	8	11	4	2	
43. Raleigh-----{	White...	268	162	106	102	91	72	1	2
	Colored...	223	110	113	101	82	39	1	
44. Randleman-----{	White...	33	17	16	15	9	9		
	Colored...								
45. Reidsville-----{	White...	36	21	15	20	9	6		1
	Colored...	55	**23	32	27	21	6		1
46. Roanoke Rapids---{	White...	24	16	8	13	8	3		
	Colored...	2	1	1	2				
47. Rockingham-----{	White...	7	5	2	4	1	2		
	Colored...	12	5	7	6	6			
48. Rocky Mount-----{	White...	65	31	34	42	19	4		
	Colored...	76	36	40	51	19	4		2
49. Roxboro-----{	White...	14	8	6	8	3	3		
	Colored...	15	1	4	2	3			
50. See Winston-Salem {	White...								
	Colored...								

\*\*1 Unknown sex.      †1 Unknown race.

## OF STILLBIRTHS)—Continued.

North Carolina	Nativity			Nativity of Parents				Mixed Parentage	
				Both Parents			North Carolina		
	United States	Foreign	Unknown	United States	Foreign	Unknown			
27	1			18	1	3	1	5	
22	10			15	4	6	4	3	
25	2			22		2	2	1	
9	2			7	2			2	
20	1		1	20				2	
7				6			1		
20	2		1	16	1		4	2	
10				5		2	1	2	
57	14		1	39	12	1	14	3	
17	1		1	10	1	3	3	2	
66	4	1	1	59	3	2	4	2	
159	4		4	117	1	20	7	22	
26	3			24			2	3	
11	1			10	1			1	
16	3	1	2	14	2	1	1	2	
15				9		2		4	
17	1			17			1		
24	1			18		3	3	1	
231	20	1	16	149	15	1	15	29	
187	14		22	123	5	56	11	28	
30	2	1		29	1	2		1	
29	7			17	6		10	3	
41	13		1	29	7	10	2	7	
20	4			13	7	2	1	1	
2				2					
7				5	1		1		
12				11			1		
55	9	1		45	9	1	6	1	
69	3		4	55	3	8	4	6	
12	1		1	12	1		1		
15				15					

TABLE I.—DEATHS (EXCLUSIVE)

Town	Race	Total	Sex		Conjugal Condition				
			Male	Female	Single	Married	Widowed	Divorced	Unknown
51. Salisbury-----{	White...	73	39	34	29	32	11		1
	Colored.	56	24	32	30	13	13		
52. Sanford-----{	White...	34	15	19	18	11	7		
	Colored.	14	8	6	8	6			
53. Scotland Neck-----{	White...	16	7	9	3	9	2		2
	Colored.	7	6	1	3	3	1		
54. Shelby-----{	White...	12	8	4	6	5	1		
	Colored.	10	4	6	3	5	1	1	
55. Southport-----{	White...	4	1	3	1	1	2		
	Colored.	7	3	4	2	4	1		
56. Statesville-----{	White...	37	17	20	17	9	11		
	Colored.	9	5	4	4	3	2		
57. Tarboro-----{	White...	37	16	21	17	13	7		
	Colored.	38	13	25	18	16	4		
58. Wadesboro-----{	White...	14	9	5	9	4	1		
	Colored.	16	6	10	10	6			
59. Washington-----{	White...	36	18	18	14	14	8		
	Colored.	76	42	34	47	22	5		2
60. Waynesville-----{	White...	10	8	2	3	6	1		
	Colored.	1		1	1				
61. Weldon-----{	White...	14	8	6	6	6	2		
	Colored.	22	11	11	7	12	3		
62. Wilmington-----{	White...	241	121	120	105	81	53		2
	Colored.	1381	191	190	203	122	51		5
63. Wilson-----{	White...	63	28	35	34	19	9		1
	Colored.	73	35	38	36	22	8		7
64. Winston-Salem-----{	White...	227	106	121	112	83	32		
	Colored.	359	185	174	216	102	38	1	2

\*1 Indian.

†1 Unknown sex.

‡1 Unknown race.

\*\*2 Unknown race.

## FIFTEENTH BIENNIAL REPORT

279

OF STILLBIRTHS)—Continued.

North Carolina	Nativity			Nativity of Parents						Mixed Parentage
	United States	Foreign	Unknown	Both Parents			Foreign	Unknown	North Carolina, United States	N. C. or U. S., Foreign or Unknown
				North Carolina	United States	Both Parents				
59	9	3	2	41	8	3	8	10	4	9
48	5	—	3	26	3	—	—	—	3	14
31	3	—	—	28	3	1	1	—	—	1
13	1	—	—	10	1	—	1	—	—	2
16	—	—	—	13	—	—	1	2	—	—
7	—	—	—	5	—	—	—	2	—	—
9	2	—	1	7	2	—	1	—	—	2
8	2	—	—	1	3	—	1	2	—	3
2	2	—	—	2	—	—	—	1	—	1
7	—	—	—	6	1	—	—	—	—	—
33	4	—	—	28	3	1	2	—	—	3
9	—	—	—	5	—	—	3	—	—	1
33	3	1	—	28	1	4	1	2	—	1
35	3	—	—	23	1	—	8	—	—	6
11	3	—	—	9	2	—	1	1	—	1
15	1	—	—	11	2	—	—	3	—	—
32	3	1	—	16	1	2	4	6	—	7
74	2	—	—	56	—	1	7	4	—	8
7	3	—	—	4	2	—	1	2	—	1
1	—	—	—	1	—	—	—	—	—	—
12	2	—	—	9	2	—	1	1	—	1
18	1	—	3	11	2	—	3	1	—	5
187	33	16	5	121	20	18	29	24	—	29
332	33	—	16	1205	34	—	76	23	—	43
58	1	1	3	53	—	1	2	3	—	4
66	4	—	3	52	1	—	10	2	—	8
208	14	2	3	144	11	3	24	14	—	31
**283	70	—	6	181	70	—	32	38	—	38

TABLE II.—DEATHS (EXCLUSIVE OF STILLBIRTHS) BY MONTH OF OCCURRENCE, FOR TOWNS OF OVER 1,000 POPULATION, FOR 1913, BY RACES.

Town	Race	Total	January	February	March	April	May	June	July	August	September	October	November	December
Total -----	White	3,584	271	298	321	264	331	316	314	295	236	293	297	348
	Colored	3,191	267	256	248	227	288	270	336	254	237	257	243	308
1. Albemarle-----	White	26	1	1	5	4	3	3	2	-----	-----	2	2	3
	Colored	1	-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2. Asheville-----	White	289	29	23	17	21	21	23	31	24	28	20	23	29
	Colored	139	13	12	12	15	10	12	10	8	15	9	11	12
3. Beaufort-----	White	21	3	3	1	1	2	1	1	3	1	2	2	1
	Colored	18	1	-----	2	2	2	2	3	3	-----	-----	-----	3
4. Bessemer City-----	White	15	-----	2	5	2	-----	-----	-----	1	-----	-----	2	3
	Colored	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5. Burlington-----	White	54	-----	4	3	2	6	5	7	6	9	2	5	5
	Colored	14	1	2	-----	1	4	2	1	-----	12	1	-----	-----
6. Chapel Hill-----	White	9	1	-----	3	1	1	1	1	-----	-----	-----	-----	2
	Colored	9	1	1	-----	1	-----	3	2	-----	-----	-----	-----	1
7. Charlotte-----	White	338	27	22	28	31	40	27	33	24	15	30	29	32
	Colored	265	18	25	17	15	16	24	27	18	17	28	29	31
8. Cherryville-----	White	14	2	2	2	1	1	1	1	-----	2	-----	1	1
	Colored	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
9. Concord-----	White	92	10	9	9	7	7	6	9	10	7	5	7	6
	Colored	46	2	6	3	4	4	4	5	2	4	4	3	5
10. Dunn-----	White	13	2	1	-----	-----	1	2	-----	1	-----	-----	4	2
	Colored	9	-----	-----	-----	4	1	-----	1	-----	-----	3	-----	-----
11. Durham-----	White	124	14	14	13	9	11	6	10	6	8	15	8	10
	Colored	167	24	20	13	11	16	10	13	10	16	9	13	12
12. Edenton-----	White	9	-----	1	2	-----	-----	1	-----	2	2	-----	-----	1
	Colored	23	2	-----	1	3	2	3	3	-----	1	2	2	4
13. Elizabeth City-----	White	47	1	6	4	1	5	5	5	5	6	4	3	2
	Colored	85	10	4	6	6	8	5	15	9	4	8	4	6
14. Fayetteville-----	White	104	5	12	9	12	10	9	5	7	4	10	10	11
	Colored	80	5	9	4	2	13	7	4	7	5	9	6	9
15. Forest City-----	White	22	2	4	3	1	3	1	1	1	-----	1	-----	5
	Colored	2	1	-----	-----	-----	-----	-----	-----	1	-----	-----	-----	-----
16. Gastonia-----	White	111	3	6	10	3	9	21	5	10	11	14	6	13
	Colored	35	2	1	2	2	6	1	2	7	4	5	1	2
17. Goldsboro-----	White	69	10	4	5	6	4	4	5	7	6	4	7	7
	Colored	104	6	5	5	13	9	6	16	8	13	2	8	13

†1 Unknown race.

TABLE II.—Continued.

Town	Race	Total	January	February	March	April	May	June	July	August	September	October	November	December
18. Graham.....{	White....	20	1	3	2	6	1	4		3				
	Colored..	8	3	1	2	2								
19. Greensboro.....{	White....	173	10	15	16	17	18	15	13	12	13	18	14	12
	Colored..	140	12	11	7	7	13	12	18	10	13	14	8	15
20. Greenville.....{	White....	25	—	3	4	1	3	1	—	2	4	1	2	4
	Colored..	\$40	2	4	11	3	1	5	4	4	1	6	5	4
21. Henderson.....{	White....	29	2	—	3	2	3	1	6	1	1	—	7	3
	Colored..	\$50	3	5	3	1	5	1	4	4	2	4	\$9	9
22. Hendersonville.....{	White....	40	2	3	3	1	3	4	3	7	2	3	4	5
	Colored..	25	1	6	2	—	2	3	5	3	1	1	—	1
23. Hertford.....{	White....	2	—	—	—	—	—	—	—	1	—	—	1	—
	Colored..	15	—	1	1	—	—	2	2	1	3	5	—	—
24. Hickory.....{	White....	25	2	1	5	1	1	3	2	—	—	3	5	2
	Colored..	7	—	—	1	1	2	1	—	—	—	1	1	—
25. High Point.....{	White....	125	10	10	10	11	9	12	10	16	6	10	8	13
	Colored..	\$60	4	4	3	4	9	7	5	3	12	3	7	9
26. Kings Mountain.....{	White....	31	1	4	2	—	1	1	5	7	3	2	2	3
	Colored..	4	—	—	—	—	—	1	—	1	1	—	—	—
27. Kinston.....{	White....	56	2	2	7	4	1	7	4	7	9	4	1	8
	Colored..	\$54	8	3	6	3	6	11	7	3	3	8	2	4
28. Laurinburg.....{	White....	13	—	2	—	1	1	1	1	—	—	2	3	1
	Colored..	11	1	—	2	—	1	1	2	—	1	3	—	—
29. Lenoir.....{	White....	37	1	2	2	2	5	8	3	3	3	3	2	3
	Colored..	6	1	—	1	—	—	1	—	2	—	—	1	—
30. Lexington.....{	White....	29	2	3	2	1	3	5	5	—	—	3	3	2
	Colored..	15	3	2	2	—	—	2	1	2	—	2	2	1
31. Louisburg.....{	White....	6	—	—	—	1	—	—	2	—	1	—	2	—
	Colored..	18	1	2	2	2	2	—	5	1	1	—	2	—
32. McAdenville.....{	White....	24	—	1	—	2	4	—	6	5	—	2	4	—
	Colored..	1	—	—	—	—	—	—	—	1	—	—	—	—
33. Marion.....{	White....	14	2	1	—	3	1	3	2	1	—	—	1	—
	Colored..	—	—	—	—	—	—	—	—	—	—	—	—	—
34. Monroe.....{	White....	28	2	2	2	2	2	2	2	2	3	4	1	4
	Colored..	32	2	2	2	2	3	3	7	4	1	1	2	3
35. Mooresville.....{	White....	27	5	2	5	3	3	2	1	2	1	—	2	1
	Colored..	11	—	—	1	1	—	2	1	1	2	1	—	2

†1 Unknown race. †‡4 Unknown race.

TABLE II.—Continued.

Town	Race	Total	January	February	March	April	May	June	July	August	September	October	November	December
36. Morehead City.....	White..	22	2	1	3	—	—	2	1	4	2	3	3	1
	Colored..	7	1	—	1	1	—	—	1	1	—	1	—	1
37. Morganton.....	White..	23	2	1	1	3	2	3	2	3	—	2	1	3
	Colored..	10	1	—	—	1	—	—	2	2	1	2	—	1
38. Mount Airy.....	White..	72	4	4	6	2	6	8	3	6	9	5	11	8
	Colored..	19	—	2	1	2	4	4	4	1	—	—	1	—
39. New Bern.....	White..	72	6	3	7	8	11	6	4	3	6	9	1	8
	Colored..	167	8	14	14	10	13	18	14	14	14	20	7	21
40. Newton.....	White..	29	2	1	4	4	5	—	3	3	—	3	2	2
	Colored..	12	1	2	2	—	1	1	4	1	—	—	—	—
41. Oxford.....	White..	22	1	—	4	1	1	3	—	1	—	1	3	7
	Colored..	15	3	1	3	—	—	—	2	—	—	1	2	3
42. Plymouth.....	White..	18	1	—	4	2	—	—	3	3	1	1	2	1
	Colored..	25	2	2	2	2	4	3	1	4	2	—	—	3
43. Raleigh.....	White..	268	22	34	30	22	23	19	23	22	20	20	14	19
	Colored..	223	16	15	17	11	26	20	25	21	15	18	18	21
44. Randleman.....	White..	33	4	1	2	3	7	3	2	2	—	2	3	4
	Colored..	—	—	—	—	—	—	—	—	—	—	—	—	—
45. Reidsville.....	White..	36	4	4	7	1	5	4	3	2	2	2	1	1
	Colored..	55	2	5	5	6	10	7	10	1	2	—	2	5
46. Roanoke Rapids.....	White..	24	1	1	1	3	3	1	6	1	2	3	—	2
	Colored..	2	—	—	—	—	—	—	—	1	—	—	—	1
47. Rockingham.....	White..	7	1	1	—	3	1	—	1	—	—	—	—	—
	Colored..	12	4	1	1	1	—	2	2	1	—	—	—	—
48. Rocky Mount.....	White..	65	5	9	4	5	7	5	5	4	3	4	12	2
	Colored..	76	3	3	7	3	10	7	15	9	2	5	7	5
49. Roxboro.....	White..	14	—	1	1	1	1	3	1	4	—	2	—	—
	Colored..	45	—	1	—	1	—	12	—	—	—	1	—	—
50. See Winston-Salem .....	White..	—	—	—	—	—	—	—	—	—	—	—	—	—
	Colored..	—	—	—	—	—	—	—	—	—	—	—	—	—
51. Salisbury.....	White..	73	3	10	5	8	6	8	5	5	5	7	3	8
	Colored..	56	3	1	6	4	5	7	8	5	6	7	3	1
52. Sanford.....	White..	34	2	4	1	3	1	3	4	4	2	2	4	4
	Colored..	14	2	2	1	1	—	1	1	—	2	1	2	1
53. Scotland Neck.....	White..	16	1	1	4	—	1	2	—	1	2	2	—	2
	Colored..	7	—	2	—	1	1	—	2	1	—	—	—	—

†1 Unknown race.

TABLE II.—Continued.

Town	Race	Total	January	February	March	April	May	June	July	August	September	October	November	December
54. Shelby.....	White...	12	1	—	1	—	—	4	1	1	1	—	—	3
	Colored..	10	1	1	—	2	—	2	—	1	1	—	1	1
55. Southport.....	White...	4	—	1	—	—	—	2	1	—	—	—	—	—
	Colored..	7	1	2	1	1	—	1	1	—	—	—	—	—
56. Statesville.....	White...	37	4	2	5	4	2	—	1	2	—	—	8	9
	Colored..	9	—	—	1	1	1	—	1	1	—	—	1	3
57. Tarboro.....	White...	37	6	—	1	2	6	3	2	2	2	7	4	2
	Colored..	38	2	2	4	3	1	2	3	5	6	5	2	3
58. Wadesboro.....	White...	14	3	2	—	—	—	2	3	—	—	—	3	1
	Colored..	16	2	1	—	—	—	3	3	1	1	2	2	1
59. Washington.....	White...	36	1	7	6	2	4	5	3	—	—	2	2	4
	Colored..	76	10	4	6	7	7	6	6	10	6	5	4	5
60. Waynesville.....	White...	10	1	—	—	2	1	2	2	—	—	—	2	—
	Colored..	1	—	—	—	1	—	—	—	—	—	—	—	—
61. Weldon.....	White...	14	—	2	2	1	—	2	3	1	1	—	2	—
	Colored..	22	4	—	2	4	—	3	—	4	1	1	3	—
62. Wilmington.....	White...	241	14	15	25	12	22	26	22	18	14	22	23	28
	Colored..	*381	27	29	35	30	32	*26	31	32	33	28	30	48
63. Wilson.....	White...	63	5	7	4	5	6	3	6	7	1	7	4	8
	Colored..	73	7	6	2	1	5	13	10	5	4	7	8	5
64. Winston-Salem.....	White...	227	23	21	10	11	22	16	19	25	14	21	18	27
	Colored..	*359	40	35	34	*33	30	*19	30	21	26	28	30	33

\*1 Unknown race.    †2 Unknown race.

TABLE III.—DEATHS (EXCLUSIVE OF STILLBIRTHS) BY AGE

Town	Race	Total	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	Under 5	5 to 9	10 to 14
Total.....	White...	3,584	619	216	90	63	36	1,124	71	54
	Colored...	3,191	717	164	67	45	33	1,026	85	80
1. Albemarle.....	White...	26	6	—	1	2	1	10	6	—
	Colored...	1	—	—	—	—	—	—	—	—
2. Asheville.....	White...	289	30	10	6	1	4	51	2	6
	Colored...	139	25	8	—	3	1	37	7	5
3. Beaufort.....	White...	21	5	1	—	1	—	7	—	—
	Colored...	18	4	1	1	—	—	6	—	—
4. Bessemer City.....	White...	15	6	1	1	—	1	9	—	—
	Colored...	—	—	—	—	—	—	—	—	—
5. Burlington.....	White...	54	12	7	4	—	1	24	—	1
	Colored...	14	5	1	—	—	1	7	1	—
6. Chapel Hill.....	White...	9	1	1	—	—	—	2	—	—
	Colored...	9	3	—	—	—	—	3	1	—
7. Charlotte.....	White...	338	74	25	1	10	1	111	11	11
	Colored...	265	41	10	3	4	5	63	8	10
8. Cherryville.....	White...	14	2	—	1	—	—	3	2	3
	Colored...	—	—	—	—	—	—	—	—	—
9. Concord.....	White...	92	18	11	5	3	3	40	3	—
	Colored...	46	22	—	2	—	—	24	1	—
10. Dunn.....	White...	13	1	3	—	—	—	4	1	—
	Colored...	9	3	—	—	—	1	4	—	—
11. Durham.....	White...	124	20	6	7	4	1	38	2	1
	Colored...	187	35	8	5	4	3	55	3	6
12. Edenton.....	White...	9	2	—	—	—	—	2	—	—
	Colored...	23	6	—	—	—	—	6	—	1
13. Elizabeth City.....	White...	47	7	—	1	—	1	9	1	1
	Colored...	85	28	5	2	1	2	38	5	1
14. Fayetteville.....	White...	104	8	2	1	1	3	15	4	4
	Colored...	80	11	5	1	—	1	18	2	3
15. Forest City.....	White...	22	5	1	2	—	—	8	1	—
	Colored...	2	1	—	—	—	—	1	—	—
16. Gastonia.....	White...	111	31	12	5	3	1	52	5	1
	Colored...	35	11	1	—	1	—	13	1	1
17. Goldsboro.....	White...	69	16	2	—	2	—	20	—	—
	Colored...	104	22	3	2	3	—	30	2	2

\*Decedents were assumed to be residents unless it was plainly stated that the usual place of residence within six months was elsewhere or unless the death occurred in a State Institution and residence was given as being elsewhere.      †1 Unknown race.

## FIFTEENTH BIENNIAL REPORT

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FOR TOWNS OF OVER 1,000 POPULATION IN 1913 BY RACES.

15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	Over 100	Unk'n	Resident*	
																			Yes	No
109	192	167	165	188	135	109	163	178	189	232	197	146	96	40	16	3	2	8	3,520	64
198	253	192	165	187	122	124	163	119	139	115	88	51	29	19	7	7	5	17	3,183	8
4	1	---	1	---	---	---	1	---	1	1	---	---	1	---	---	---	---	24	2	
1	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	1	
10	22	25	25	27	21	11	12	14	16	15	14	8	6	2	---	---	2	235	54	
13	5	8	10	14	6	5	8	5	5	5	3	---	2	1	---	---	---	131	8	
1	1	1	1	1	1	1	1	2	3	2	2	1	1	1	1	1	1	1	21	
1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	18	
1	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	15	
1	3	2	2	1	1	1	2	4	2	3	4	3	1	1	1	1	1	1	54	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	
1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	9	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	
10	14	12	12	15	16	11	25	20	13	13	20	15	5	4	4	4	4	337	1	
20	25	20	22	21	8	7	19	10	7	16	4	1	1	1	1	1	1	1	265	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	
1	4	4	4	5	2	2	4	2	3	9	4	2	1	1	1	1	1	1	92	
4	2	2	3	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	46	
1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	
5	9	4	6	8	3	3	7	7	7	9	7	3	1	2	2	2	1	123	1	
24	12	10	9	8	5	8	6	5	6	3	3	2	1	1	1	1	1	1	167	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23	
1	3	2	1	1	1	3	5	1	3	7	1	4	1	2	1	1	1	47		
4	6	2	1	2	1	2	2	7	7	2	2	1	1	1	1	1	1	85		
3	5	5	8	6	3	3	7	10	5	6	9	5	3	1	2	2	2	102	2	
7	3	3	7	7	5	1	2	3	8	1	3	1	1	1	1	1	1	80		
2	1	1	1	1	2	1	1	1	1	1	1	2	2	2	2	2	2	22		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2		
1	6	6	8	2	5	3	2	2	5	6	2	2	2	2	2	2	2	111		
3	4	1	1	2	2	3	3	3	3	1	1	1	1	1	1	1	1	35		
3	5	6	2	5	3	2	1	3	5	4	3	1	3	3	3	3	3	69		
2	9	8	5	9	4	4	6	5	9	3	2	2	1	1	1	1	1	104		

TABLE III.—DEATHS (EXCLUSIVE)

Town	Race	Total	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	Total Under 5	5 to 9	10 to 14
18. Graham.....	White...	20	8	3	2	1	—	14	—	—
	Colored...	8	1	1	2	—	—	4	—	—
19. Greensboro.....	White...	173	29	5	5	1	2	42	2	1
	Colored...	140	33	13	7	5	1	59	3	4
20. Greenville.....	White...	25	10	2	1	—	—	13	—	—
	Colored...	*40	7	1	—	—	—	8	—	—
21. Henderson.....	White...	29	3	1	1	—	—	5	—	—
	Colored...	*50	5	*5	2	1	1	*14	5	2
22. Hendersonville.....	White...	40	5	1	—	—	—	6	2	1
	Colored...	25	6	—	—	—	1	7	1	3
23. Hertford.....	White...	2	1	—	—	—	—	1	—	—
	Colored...	15	1	1	—	—	—	2	1	1
24. Hickory.....	White...	25	4	1	—	—	—	5	—	—
	Colored...	7	2	—	—	1	—	3	—	—
25. High Point.....	White...	125	32	11	6	4	2	55	1	—
	Colored...	*60	*15	2	3	—	—	*20	2	1
26. Kings Mountain.....	White...	31	11	2	1	1	1	16	—	1
	Colored...	4	1	—	—	—	—	1	—	—
27. Kinston.....	White...	56	15	5	—	4	—	24	1	—
	Colored...	134	*18	3	—	2	1	24	2	1
28. Laurinburg.....	White...	13	3	1	—	—	—	4	—	2
	Colored...	11	—	—	—	—	—	—	—	—
29. Lenoir.....	White...	37	4	5	—	1	—	10	—	—
	Colored...	6	—	—	—	—	—	—	—	1
30. Lexington.....	White...	29	4	4	1	—	1	10	—	—
	Colored...	15	—	—	—	—	—	—	—	1
31. Louisburg.....	White...	6	—	1	—	—	—	1	—	1
	Colored...	18	1	—	—	—	—	1	—	—
32. McAdenville.....	White...	24	5	2	1	—	1	9	1	—
	Colored...	1	—	—	—	—	—	—	—	—
33. Marion.....	White...	14	2	—	2	—	—	4	1	1
	Colored...	—	—	—	—	—	—	—	—	—
34. Monroe.....	White...	28	3	2	—	1	—	6	1	—
	Colored...	32	11	1	2	—	—	14	2	—
35. Mooresville.....	White...	27	8	2	—	1	—	11	—	—
	Colored...	11	4	—	—	—	—	4	—	—

†1 Unknown race.    \*2 unknown race.    †4 Unknown race.

## FIFTEENTH BIENNIAL REPORT

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**OF STILLBIRTHS) BY AGE.—*Continued.***

TABLE III.—DEATHS (EXCLUSIVE)

Town	Race	Total	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	Total Under 5	5 to 9	10 to 14
36. Morehead City.....	White...	22	3	2	1	1	—	7	—	1
	Colored...	7	4	—	—	—	—	4	—	—
37. Morganton.....	White...	23	3	1	—	—	—	4	—	1
	Colored...	10	1	2	—	—	1	4	—	—
38. Mount Airy.....	White...	72	20	7	4	—	1	32	2	—
	Colored...	19	4	1	—	—	—	5	—	1
39. New Bern.....	White...	72	17	4	1	—	—	22	1	—
	Colored...	167	31	13	1	—	—	45	3	4
40. Newton.....	White...	29	10	4	1	1	—	16	—	—
	Colored...	12	4	—	—	—	—	4	1	3
41. Oxford.....	White...	22	4	1	—	1	—	6	—	—
	Colored...	15	—	—	1	—	—	1	—	—
42. Plymouth.....	White...	18	3	2	—	—	—	5	—	—
	Colored...	25	4	2	—	—	—	6	—	—
43. Raleigh.....	White...	268	37	7	4	4	4	56	4	4
	Colored...	223	43	9	9	4	1	66	2	4
44. Randleman.....	White...	33	8	2	2	1	—	13	—	—
	Colored...	—	—	—	—	—	—	—	—	—
45. Reidsville.....	White...	36	10	3	2	—	—	15	2	—
	Colored...	55	12	6	1	1	—	20	2	2
46. Roanoke Rapids.....	White...	24	7	—	—	—	—	7	—	2
	Colored...	2	—	—	—	—	—	—	—	—
47. Rockingham.....	White...	7	1	—	—	1	—	2	—	1
	Colored...	12	2	—	—	—	2	4	1	—
48. Rocky Mount.....	White...	65	23	5	4	1	1	34	2	1
	Colored...	76	31	4	3	2	1	41	—	1
49. Roxboro.....	White...	14	5	1	—	—	—	6	—	—
	Colored...	*5	1	1	—	—	—	2	—	—
51. Salisbury.....	White...	73	12	2	—	2	3	19	1	—
	Colored...	56	14	1	2	1	—	18	—	—
52. Sanford.....	White...	34	6	4	—	1	—	11	—	1
	Colored...	14	3	—	1	—	—	4	1	1
53. Scotland Neck.....	White...	16	1	—	—	—	—	1	—	1
	Colored...	7	1	—	—	—	1	2	1	—
54. Shelby.....	White...	12	4	—	1	—	—	5	1	—
	Colored...	10	3	—	—	—	—	3	—	—

\*1 Unknown race.

## OF STILLBIRTHS) BY AGE.—Continued.

15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	Over 100	Unk'n	Resident			
																			Yes	No		
1	—	2	4	—	—	1	2	1	1	1	—	1	—	—	—	—	—	—	—	22	—	
—	—	—	—	1	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	7	—	
1	3	2	—	—	1	2	—	—	1	4	—	1	3	—	—	—	—	—	—	23	—	
—	—	1	—	1	—	—	—	—	1	1	—	1	1	—	—	—	—	—	—	10	—	
3	—	2	6	3	3	1	2	2	2	2	6	3	3	—	—	—	—	—	—	72	—	
2	3	3	1	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	19	—	
3	—	2	1	3	2	6	3	5	4	6	9	2	2	1	—	—	—	—	—	72	—	
13	12	9	10	12	5	6	10	5	5	8	9	7	5	1	2	—	—	—	—	1	167	—
2	1	1	—	—	1	2	—	—	1	—	—	4	1	—	—	—	—	—	—	29	—	
1	—	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	12	—	
—	—	—	—	—	—	2	—	2	—	1	2	—	2	4	1	2	—	—	—	22	—	
—	—	2	2	—	—	—	2	1	—	3	3	1	—	—	—	—	—	—	—	15	—	
—	—	1	—	—	—	—	1	2	—	3	4	2	—	—	—	—	—	—	—	18	—	
—	—	1	—	—	2	—	1	2	—	3	3	3	4	2	—	—	—	—	—	25	—	
6	8	8	9	14	15	7	14	16	19	25	24	19	12	4	3	—	—	—	—	1	268	—
9	21	13	10	10	9	12	7	13	15	12	7	2	3	3	3	—	—	—	—	1	223	—
—	—	2	1	2	6	1	—	—	1	2	—	3	1	—	1	—	—	—	—	—	33	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	2	—	3	—	2	1	1	2	3	—	2	2	—	1	—	—	—	—	1	35	1
1	2	2	1	1	2	—	8	2	3	—	5	2	1	—	—	—	—	—	—	—	55	—
—	—	2	1	1	—	—	2	2	1	2	1	1	1	—	—	—	—	—	—	—	24	—
—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	2	—	
—	—	2	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—
1	1	1	2	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	—
—	—	2	2	4	—	3	2	1	1	2	3	4	1	3	—	—	—	—	—	—	65	—
1	2	5	5	6	—	2	5	1	3	3	—	—	—	—	—	—	—	—	—	—	76	—
—	—	1	1	1	—	—	—	—	1	—	—	1	1	1	—	—	—	—	—	—	14	—
—	—	1	1	1	—	—	—	—	1	—	—	1	1	1	—	—	—	—	—	—	5	—
4	8	8	3	—	6	—	3	6	2	3	3	3	3	3	—	—	—	—	—	—	73	—
5	4	6	4	1	1	1	2	2	3	3	2	2	1	—	—	—	—	—	—	—	56	—
—	—	2	4	2	1	2	1	—	3	2	1	2	1	1	—	—	—	—	—	—	34	—
—	—	1	1	—	1	—	—	—	3	1	—	—	—	—	—	—	—	—	—	—	14	—
—	—	1	—	2	—	—	—	1	—	2	3	—	—	4	—	1	—	—	—	—	16	—
1	—	—	1	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	7	—	
—	—	1	—	1	—	1	—	—	—	2	1	1	1	2	—	—	—	—	—	—	12	—
—	—	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	

TABLE III.—DEATHS (EXCLUSIVE)

Town	Race	Total	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	Total Under 5	5 to 9	10 to 14
55. Southport.....	White....	4	1					1		
	Colored..	7		1				1		
56. Statesville.....	White....	37	11	3				14		
	Colored..	9	1					1	1	1
57. Tarboro.....	White....	37	11			1		12	1	1
	Colored..	38	10	3	1			14	3	
58. Wadesboro.....	White....	14	5	2				7		
	Colored..	16	6		1			7	1	
59. Washington.....	White....	36	5	1	1	1		8		1
	Colored..	76	29	3	1			33	2	2
60. Waynesville.....	White....	10	1		1			2		
	Colored..	1								
61. Weldon.....	White....	14	2	1				3		
	Colored..	22	3	1		1		5		
62. Wilmington.....	White....	241	49	14	4	1		68	3	
	Colored..	1381	106	19	8	1	2	136	4	6
63. Wilson.....	White....	63	18	4	1		1	24	2	2
	Colored..	73	12	7	1	1	1	22	1	1
64. Winston-Salem.....	White....	227	51	16	8	5	2	82	5	3
	Colored..	*359	*70	22	5	9	6	*112	14	12

\*2 Unknown race.      †1 Unknown race.

## FIFTEENTH BIENNIAL REPORT

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**OF STILLBIRTHS) BY AGE.—Continued.**

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS) FROM CERTAIN

Town	Race	Total	Typhoid Fever	Typhus Fever	Relapsing Fever	Malaria	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria and Croup	Influenza	Military Fever	Asiatic Cholera	Cholera Nostras
Total.....	White...	3,584	135	—	—	25	6	80	4	68	31	40	—	—	—
	Colored...	3,191	109	—	—	41	2	25	2	61	16	29	—	—	—
1. Albemarle.....	White...	26	1	—	—	—	—	3	—	3	—	—	—	—	—
	Colored...	1	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Asheville.....	White...	239	6	—	—	—	—	—	1	—	3	2	5	—	—
	Colored...	139	2	—	—	—	—	—	1	—	5	4	5	—	—
3. Beaufort.....	White...	21	2	—	—	—	—	—	—	—	4	—	—	—	—
	Colored...	18	—	—	—	—	—	—	—	—	—	—	—	—	—
4. Bessemer City.....	White...	15	—	—	—	—	—	—	—	—	1	1	—	—	—
	Colored...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. Burlington.....	White...	54	5	—	—	—	—	2	—	1	—	—	—	—	—
	Colored...	14	1	—	—	—	—	1	—	—	—	—	1	—	—
6. Chapel Hill.....	White...	9	—	—	—	—	—	—	1	—	—	—	—	—	—
	Colored...	9	1	—	—	—	—	—	—	—	—	—	—	—	—
7. Charlotte.....	White...	338	14	—	—	—	1	—	8	1	7	1	6	—	—
	Colored...	265	11	—	—	—	5	—	—	—	4	1	6	—	—
8. Cherryville.....	White...	14	2	—	—	—	—	—	—	—	—	1	—	—	—
	Colored...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9. Concord.....	White...	92	2	—	—	—	5	—	2	—	6	1	1	—	—
	Colored...	46	2	—	—	—	—	—	—	—	1	—	—	—	—
10. Dunn.....	White...	13	—	—	—	—	—	—	—	—	—	1	—	—	—
	Colored...	9	—	—	—	—	—	—	—	—	—	—	—	—	—
11. Durham.....	White...	124	3	—	—	—	—	6	—	3	—	1	—	—	—
	Colored...	167	7	—	—	—	3	—	5	—	1	1	1	—	—
12. Edenton.....	White...	9	1	—	—	—	1	—	—	—	—	—	—	—	—
	Colored...	23	—	—	—	—	—	—	—	—	—	—	—	—	—
13. Elizabeth City.....	White...	47	—	—	—	—	—	—	—	—	2	1	—	—	—
	Colored...	85	4	—	—	—	2	—	—	—	—	—	—	—	—
14. Fayetteville.....	White...	104	3	—	—	—	—	1	—	—	1	1	2	—	—
	Colored...	80	1	—	—	—	—	—	—	—	2	1	—	—	—
15. Forest City.....	White...	22	2	—	—	—	—	—	—	—	—	—	—	—	—
	Colored...	2	—	—	—	—	—	—	—	—	—	—	—	—	—
16. Gastonia.....	White...	111	4	—	—	—	1	—	2	—	2	—	2	—	—
	Colored...	35	1	—	—	—	—	—	—	—	3	—	2	—	—

†1 Unknown race.

**CAUSES FOR TOWNS OF OVER 1,000 POPULATION, FOR 1913, BY RACES.**

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS)

Towns	Race	Syphilis	Cancer and Other Malignant Tumors of the											
			Gonococcus Infection	Buccal Cavity	Stomach and Liver	Peritonæum, Intestines and Rectum	Female Genital Organs	Breast	Skin	Other Organs or Specified Organs	Other Tumors (Tumors of the Female Genital Organs Excepted)	Acute Articular Rheumatism	Chronic Rheumatism and Gout	Scurvy
Total.....	White....	12	1	3	37	15	35	4	5	20	-----	7	3	21
	Colored....	33	---	1	19	5	25	9	1	10	2	5	1	4
1. Albemarle.....	White....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2. Asheville.....	White....	1	-----	4	-----	3	-----	-----	6	-----	1	1	-----	1
3. Beaufort.....	White....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4. Bessemer City.....	White....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5. Burlington.....	White....	1	-----	2	-----	-----	-----	-----	-----	1	-----	-----	-----	-----
6. Chapel Hill.....	White....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
7. Charlotte.....	White....	2	-----	1	4	1	2	1	-----	-----	-----	1	-----	2
8. Cherryville.....	White....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
9. Concord.....	White....	-----	-----	-----	-----	-----	-----	-----	1	-----	-----	-----	-----	1
10. Dunn.....	White....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
11. Durham.....	White....	-----	-----	-----	-----	1	1	-----	1	-----	-----	-----	-----	2
12. Edenton.....	White....	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	-----	1	-----
13. Elizabeth City.....	White....	-----	-----	-----	-----	-----	1	-----	1	-----	-----	1	1	-----
14. Fayetteville.....	White....	1	-----	2	-----	3	-----	1	-----	-----	2	-----	1	1
15. Forest City.....	White....	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	-----	-----	-----
16. Gastonia.....	White....	-----	-----	3	1	1	-----	-----	1	-----	-----	-----	-----	-----

BIRTHS) FROM CERTAIN CAUSES.—*Continued.*

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS)

BIRTHS) FROM CERTAIN CAUSES.—*Continued.*

TABLE IV.—DEATHS (EXCLUSIVE OF STILL

Town	Race	Hydatid Tumor of the Liver	Cirrhosis of the Liver	Biliary Calculi	Other Diseases of the Liver	Diseases of the Spleen	Simple Peritonitis (Nonphthiritic)	Other Diseases of the Digestive System (Cancer and Tuberculosis Excepted)	Acute Nephritis	Bright's Disease	Chyluria	Other Diseases of the Kidneys and Annexa	Caleuli of the Urinary Passages	Urinary Passages	Diseases of the Bladder	Diseases of the Urethra, Etc.	Urinary Abscess, Etc.
Total.....{	White.....	19	14	10	6	31	202					4	2	3	1		
	Colored.....	12		5	6	44	156*					1	1	6	4		
1. Albemarle.....{	White.....			1													
	Colored.....																
2. Asheville.....{	White.....		2					2	11								1
	Colored.....							1	8								1
3. Beaufort.....{	White.....											5					
	Colored.....											1					
4. Bessemer City.....{	White.....																
	Colored.....																
5. Burlington.....{	White.....										1						
	Colored.....										1						
6. Chapel Hill.....{	White.....											1					
	Colored.....											1					
7. Charlotte.....{	White.....		3						7	23							
	Colored.....				1	2			8								
8. Cherryville.....{	White.....																
	Colored.....																
9. Concord.....{	White.....									1							
	Colored.....									1							
10. Dunn.....{	White.....										1						
	Colored.....									1							
11. Durham.....{	White.....	1		1					2	9							
	Colored.....	1							2	5							
12. Edenton.....{	White.....										1						1
	Colored.....										1						1
13. Elizabeth City.....{	White.....	2	2								1	2					
	Colored.....										2	5					
14. Fayetteville.....{	White.....		2		1						9		2	1			
	Colored.....		1								2	4	1				
15. Forest City.....{	White.....																
	Colored.....																
16. Gastonia.....{	White.....	1		1							1	3					
	Colored.....										2	1					

BIRTHS) FROM CERTAIN CAUSES.—*Continued.*

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS).

## FIFTEENTH BIENNIAL REPORT

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BIRTHS) FROM CERTAIN CAUSES.—*Continued.*

TABLE IV.—DEATHS (EXCLUSIVE OF STILL)

Town	Race	Total	Typhoid Fever	Typhus Fever	Relapsing Fever	Malaria	Smallpox	Messies	Scarlet Fever	Whooping Cough	Diphtheria and Croup	Influenza	Military Fever	Asiatic Cholera	Cholera Nostras
17. Goldsboro.....{	White.....	69	1							2	1				
	Colored.....	104	4							4					
18. Graham.....{	White.....	20						4							
	Colored.....	8													
19. Greensboro.....{	White.....	173	7			1		3		1	1	1			
	Colored.....	140	2					4	1	7	1	1			
20. Greenville.....{	White.....	25											1		
	Colored.....	*40											1		
21. Henderson.....{	White.....	29	2							1	1	1			
	Colored.....	*50	2			1				2					
22. Hendersonville.....{	White.....	40	1			1			1	1					
	Colored.....	25	3						1				1		
23. Hertford.....{	White.....	2													
	Colored.....	15				1									
24. Hickory.....{	White.....	25	1										1		
	Colored.....	7													
25. High Point.....{	White.....	125	9					2		3	4	2			
	Colored.....	60	5					1				1			
26. Kings Mountain.....{	White.....	31					1	1		1	1	2			
	Colored.....	4													
27. Kinston.....{	White.....	56	3			1	1	1		2					
	Colored.....	*54				5				*2					
28. Laurinburg.....{	White.....	13													
	Colored.....	11	1												
29. Lenoir.....{	White.....	37	2							2					
	Colored.....	6													
30. Lexington.....{	White.....	29	2					2				1			
	Colored.....	15						1							
31. Louisburg.....{	White.....	6													
	Colored.....	18	2												
32. McAdenville.....{	White.....	24						2							
	Colored.....	1													
33. Marion.....{	White.....	14	1									1			
	Colored.....														

\*4 Unknown race.

\*\*2 Unknown race.

\*1 Unknown race.

BIRTHS) FROM CERTAIN CAUSES.—Continued.

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS)

Towns	Race	Syphilis	Gonococcus Infection	Cancer and Other Malignant Tumors of the								Scourvy	Diabetes	Ezophthalmic Goitre
				Buccal Cavity	Stomach and Liver	Peritoneum, Intestines and Rectum.	Female Genital Organs	Breast	Skin	Other Organs or Specified Organs	Other Tumors (Tumors of the Female Genital Organs Excepted)			
51. Salisbury.....	White.....								1					1
	Colored.....	2		1										
52. Sanford.....	White.....	1				1	1							2
	Colored.....													
53. Scotland Neck.....	White.....								1					
	Colored.....													
54. Shelby.....	White.....						1							
	Colored.....													
55. Southport.....	White.....					1								
	Colored.....													
56. Statesville.....	White.....						2	1			1			
	Colored.....						1							
57. Tarboro.....	White.....			2										
	Colored.....			1			1	1						
58. Wadesboro.....	White.....													
	Colored.....													
59. Washington.....	White.....	1			2	1								
	Colored.....					1	1							
60. Waynesville.....	White.....													
	Colored.....													
61. Weldon.....	White.....									1				
	Colored.....													
62. Wilmington.....	White.....	1			2	2	5		1	1			2	1
	Colored.....	4				3	1					2		
63. Wilson.....	White.....						1					1		
	Colored.....						1							
64. Winston-Salem....	White.....	2			2		2					1	1	1
	Colored.....	5			3		2	2						

## FIFTEENTH BIENNIAL REPORT

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BIRTHS) FROM CERTAIN CAUSES.—*Continued.*

TABLE IV.—DEATHS (EXCLUSIVE OF STILL

## FIFTEENTH BIENNIAL REPORT

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**BIRTHS) FROM CERTAIN CAUSES.—*Continued.***

TABLE IV.—DEATHS (EXCLUSIVE OF STILL

Town	Race	Hydatid Tumor of the Liver	Cirrhosis of the Liver	Biliary Calculi	Other Diseases of the Liver	Diseases of the Spleen	Simple Peritonitis (Nonpuerperal)	Other Diseases of the Digestive System (Cancer and Tuberculosis Excepted)	Acute Nephritis	Bright's Disease	Chyluria	Other Diseases of the Kidneys and Urethra	Calenii of the Urinary Passages	Diseases of the Bladder	Diseases of the Urethra, Urinary Abscess, Etc.	
51. Salisbury.....{	White.....								1	3						
	Colored.....								1	3						
52. Sanford.....{	White.....			1						2						
	Colored.....															
53. Scotland Neck.....{	White.....	1									1					
	Colored.....															
54. Shelby.....{	White.....									1						
	Colored.....															
55. Southport.....{	White.....															
	Colored.....															
56. Statesville.....{	White.....									3						1
	Colored.....									1						
57. Tarboro.....{	White.....								1	1						
	Colored.....															
58. Wadesboro.....{	White.....										1					
	Colored.....										2					
59. Washington.....{	White.....										3					
	Colored.....										1	0				
60. Waynesville.....{	White.....											1				
	Colored.....															
61. Weldon.....{	White.....									2						1
	Colored.....															
62. Wilmington.....{	White.....	2								2	28					
	Colored.....	1		1		1				4	31				3	1
63. Wilson.....{	White.....											3				
	Colored.....											1				
64. Winston.....{	White.....		1	2		1				2	9					
	Colored.....									9	7					1

BIRTHS) FROM CERTAIN CAUSES.—*Continued.*

TABLE IV.—DEATHS (EXCLUSIVE OF STILLBIRTHS)

## FIFTEENTH BIENNIAL REPORT

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BIRTHS) FROM CERTAIN CAUSES.—*Continued.*

Configuration		Burns (Conflagration Excepted)		Absorption of Deleterious Gases (Conflagration Excepted)		Traumatism by Firearms		Traumatism by Cutting or Piercing Instruments		Traumatism by Fall		Traumatism in Mines and Quarries		Traumatism by Machines		Traumatism by Other Crushing (Vehicles, Railways, Landslides, Etc.)		Injuries by Animals		Starvation		Effects of Heat		Lightning		Electricity (Lightning Excepted)		Homicide by Firearms		Homicide by Cutting or Piercing Instruments		Homicide by Other Means		Fractures (Cause Not Specified)		Other External Violence		III Defined Organic Disease		Sudden Death		Cause of Death	
2	1																																										
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TABLE V.—DEATHS AND DEATH RATES FROM CERTAIN IMPORTANT CAUSES FOR

Town	Total Deaths	Death Rate Per 1000	Deaths by Races	Death Rates per 1000 by Races	Typhoid Fever		Measles	
					No. of Deaths	†Death Rate	No. of Deaths	†Death Rate
Registration area of United States*-----	838,951	14.6	‡	‡	8,971	16.5	4,016	7.0
Total registration cities of North Carolina-----	6,775	17.1	{ W 3,584 C 3,191	{ 14.1 22.9	135 109	52.9 78.1	80 25	31.3 17.9
Asheville-----	428	21.6	{ W 289 C 139	{ 20.5 24.6	6 2	42.5 35.4	1	7.1
Burlington-----	**68	13.2	{ W 54 C **14	{ 11.6 26.3	5 1	107.9 188.0	2	43.1
Charlotte-----	603	16.1	{ W 338 C 265	{ 13.8 20.5	14 11	57.1 85.0	8	32.7
Concord-----	138	15.6	{ W 92 C 46	{ 13.2 24.8	2 2	28.6 107.5	2	28.6
Durham-----	291	13.4	{ W 124 C 167	{ 9.1 20.4	3 7	22.1 85.5	6 5	44.2 61.1
Elizabeth City-----	132	14.5	{ W 47 C 85	{ 9.8 19.8	4	93.1	-----	-----
Fayetteville-----	184	24.3	{ W 104 C 80	{ 25.8 22.6	3 1	74.2 28.2	1	24.8
Gastonia-----	146	23.8	{ W 111 C 35	{ 23.5 24.9	4 1	84.6 71.1	2	42.3
Goldsboro-----	173	28.0	{ W 69 C 104	{ 19.0 40.7	1 4	27.6 156.8	-----	-----
Greensboro-----	313	17.6	{ W 173 C 140	{ 15.2 21.9	7 2	61.4 31.2	3 4	26.3 62.5
High Point-----	185	16.4	{ W 125 C 60	{ 14.2 24.2	9 5	102.5 201.8	2 1	22.8 40.3
Kinston-----	*†110	13.9	{ W 56 C *†54	{ 12.5 15.7	3	66.6	1	22.2
New Bern-----	239	23.4	{ W 72 C 167	{ 16.3 28.8	3 7	68.0 120.9	1	22.7
Raleigh ¶-----	491	24.9	{ W 268 C 223	{ 22.2 29.4	7 6	57.6 79.1	4 3	32.9 39.6
Reidsville-----	91	17.1	{ W 36 C 55	{ 11.1 26.1	4	123.8	7 3	217.0 142.2
Rocky Mount-----	141	14.5	{ W 65 C 76	{ 10.8 20.5	2 1	33.2 27.0	-----	-----

\*Year 1912-1913 statistics not yet available. †Per 100,000 population. ‡Not given by races.

§High tuberculosis death rate due largely to non-residents. \*\*1 Unknown race.

¶Unknown race. ¶Including State Institutions.

## TOWNS HAVING A POPULATION OF OVER 5,000 DURING YEAR 1913 BY RACES.

Whooping Cough		Diphtheria and Croup		Tuberculosis (All Forms)		Cancer and Other Malignant Tumors		Pneumonia		Diarrhoea and Enteritis (Under 2 Years)	
No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate
5,119	9.3	9,709	18.2	80,654	149.5	42,464	77.0	70,913	132.2	36,817	70.3
68	26.6	31	12.1	429	168.0	129	50.5	205	80.2	270	105.8
61	43.7	16	11.5	479	343.2	74	53.0	297	212.8	246	176.2
3	21.3	2	14.2	96	680.0	13	92.1	17	120.5	8	56.7
5	88.6	4	70.8	23	407.0	1	17.7	13	230.1	6	106.4
1	21.6	-----	-----	5	107.9	3	64.7	3	64.7	8	172.6
				1	188.0	1	188.0	1	188.0	2	376.0
7	28.6	1	4.0	31	126.6	9	36.7	16	65.3	32	130.7
4	30.9	1	7.7	37	286.0	7	54.1	28	216.4	8	61.9
6	86.0	1	14.3	13	186.3	1	14.3	8	114.7	7	100.9
1	53.8	-----	-----	13	699.5	-----	-----	7	37.7	2	107.5
3	22.1	-----	-----	15	110.5	3	22.1	8	59.0	4	29.5
1	12.2	1	12.2	23	281.0	1	12.2	14	171.1	15	183.2
2	41.8	1	20.9	5	104.5	1	20.9	1	20.9	2	41.8
				15	349.0	1	23.3	1	23.3	12	279.3
1	24.8	1	24.8	11	272.1	5	124.1	3	74.3	3	74.3
2	56.5	1	28.2	16	451.0	1	28.2	4	112.9	7	197.8
2	42.3	-----	-----	17	359.5	5	105.8	6	126.9	11	232.8
3	213.5	-----	-----	5	355.9	1	71.1	3	213.5	2	142.3
2	55.2	1	27.6	7	193.0	1	27.6	6	165.3	3	82.6
4	156.8	-----	-----	8	313.8	5	196.1	15	587.5	4	156.8
1	8.8	1	8.8	12	105.1	8	70.1	14	122.8	9	78.8
7	109.4	1	15.6	17	265.9	6	93.8	9	140.8	13	203.3
3	34.2	4	45.6	10	113.9	4	45.6	12	136.7	9	102.5
				9	363.0	2	80.6	6	242.0	4	161.2
2	44.4	-----	-----	5	111.1	2	44.4	6	133.3	2	44.4
**2	58.3	-----	-----	10	291.2	-----	-----	5	145.6	7	204.0
				7	158.9	3	68.0	4	90.7	5	113.2
1	17.3	-----	-----	31	536.0	2	34.5	20	345.0	8	138.1
5	41.2	3	24.7	17	139.5	7	57.6	7	57.6	11	90.5
		1	13.2	20	264.0	8	-----	24	316.8	17	224.5
		1	47.4	6	186.0	3	93.0	1	31.0	3	93.0
				7	332.0	3	142.2	7	332.0	3	142.2
4	66.4	-----	-----	5	83.1	-----	-----	5	83.1	11	182.8
				11	297.0	1	27.0	5	135.0	12	324.0

TABLE V.—DEATHS AND DEATH RATES FROM CERTAIN IMPORTANT

Town	Total Deaths	Death Rate Per 1000	Deaths by Races	Death Rates per 1000 by Races	Typhoid Fever		Measles	
					No. of Deaths	†Death Rate	No. of Deaths	†Death Rate
Salisbury.....	129	17.4 {	W 73 C 56	14.9 22.4	4	81.5 160.0	2 4	40.8 160.0
Washington.....	112	16.8 {	W 36 C 76	10.7 23.1	2	60.8	.....	.....
Wilmington.....	**622	22.8 {	W 241 C **381	16.7 29.6	11	76.4 85.6	1	6.9
Wilson.....	136	17.5 {	W 63 C 73	14.7 21.1	4 2	93.3 57.8	2	57.8
Winston-Salem.....	*586	21.0 {	W 227 C *359	13.7 31.6	10 19	60.3 167.5	7	42.2

\*Year 1912; 1913 statistics not yet available. †Per 100,000 population. ‡Not given by races.

\*\*1 Unknown race. \*2 Unknown race.

CAUSES, FOR TOWNS HAVING A POPULATION OF OVER 5,000.—*Continued.*

Whooping Cough		Diphtheria and Croup		Tuberculosis (All Forms)		Cancer and Other Malignant Tumors		Pneumonia		Diarrhoea and Enteritis (Under 2 Years)	
No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate	No. of Deaths	†Death Rate
1	20.4	—	—	6	122.3	1	20.4	2	40.8	5	101.9
				5	199.7	1	40.0	3	120.0	7	280.0
		1	29.8	1	29.8	4	119.2	3	89.3	3	89.3
		1	30.4	12	365.0	2	60.8	1	30.4	8	243.0
3	20.9	2	13.9	24	166.9	11	76.4	10	69.5	20	139.0
3	23.4	—	—	44	342.2	4	31.2	42	327.0	39	303.5
2	46.6	—	—	6	139.8	1	23.3	2	46.6	7	163.1
1	28.9	—	—	10	289.0	1	28.9	5	144.3	8	231.2
2	12.0	3	18.1	24	144.7	4	24.1	18	108.5	26	156.8
9	79.4	2	17.6	59	520.0	7	61.7	40	352.5	**28	247.0

TABLE VI.—DEATHS (EXCLUSIVE OF STILLBIRTHS) FROM VARIOUS CAUSES FOR

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
Total.....{	White...	3,584	722	213	90	64	35	1,124
	Colored...	3,191	717	164	68	45	32	1,026
1. Typhoid fever.....{	White...	135	2	5	5	1	2	15
	Colored...	*109	3	2	2	2	*4	*13
2. Typhus fever.....{	White...							
	Colored...							
3. Relapsing fever.....{	White...							
	Colored...							
4. Malaria.....{	White...	25	3	2	2	2	—	9
	Colored...	41	8	3	1	—	—	12
5. Smallpox.....{	White...	6	1	—	—	—	—	1
	Colored...	2	—	—	—	—	—	—
6. Measles.....{	White...	80	11	22	11	10	3	57
	Colored...	25	3	9	6	1	1	20
7. Scarlet fever.....{	White...	4	1	—	—	1	1	3
	Colored...	2	—	1	—	—	—	1
8. Whooping cough.....{	White...	68	33	15	4	7	5	64
	Colored...	*61	*23	21	7	4	1	*56
9. Diphtheria and croup.....{	White...	31	3	6	6	8	2	25
	Colored...	16	1	4	2	2	2	11
10. Influenza.....{	White...	40	4	1	—	—	—	5
	Colored...	29	3	—	1	1	1	6
11. Miliary fever.....{	White...							
	Colored...							
12. Asiatic cholera.....{	White...							
	Colored...							
13. Cholera nostras.....{	White...							
	Colored...							
14. Dysentery.....{	White...	14	—	—	—	—	—	—
	Colored...	12	2	1	—	—	—	3
15. Plague.....{	White...							
	Colored...							
16. Yellow fever.....{	White...							
	Colored...							
17. Leprosy.....{	White...							
	Colored...							
18. Erysipelas.....{	White...	13	10	—	—	—	—	10
	Colored...	1	—	—	—	—	—	—

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**THE REGISTRATION AREA OF NORTH CAROLINA, BY AGES AND RACES, FOR 1913**

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
19. Other epidemic diseases.....{	White							
	Colored	1			1			1
20. Purulent infection and septichæmia.....{	White	10				1		1
	Colored	8		1				1
21. Glanders.....{	White							
	Colored							
22. Anthrax.....{	White							
	Colored							
23. Rabies.....{	White	1						
	Colored							
24. Tetanus.....{	White	6	3					3
	Colored	47	35	1	1			37
25. Mycoses.....{	White							
	Colored							
26. Pellagra.....{	White	91	1		1			2
	Colored	67		1	1		1	3
27. Beriberi.....{	White							
	Colored							
28. Tuberculosis of the lungs.....{	White	364	1	3	1			5
	Colored	412	12	3	7	4	2	28
29. Acute miliary tuberculosis.....{	White	11	1					1
	Colored	19				2		2
30. Tuberculous meningitis.....{	White	25	11	3	1			15
	Colored	15		3	2			5
31. Abdominal tuberculosis.....{	White	13						
	Colored	21		1		1		2
32. Pott's disease.....{	White	1						
	Colored	2						
33. White swellings.....{	White	4	2					2
	Colored							
34. Tuberculosis of other organs.....{	White	5	1			1	1	3
	Colored	8				1		1
35. Disseminated tuberculosis.....{	White	6				1		1
	Colored	2	1					1
36. Rickets.....{	White							
	Colored	9	7	2				9
37. Syphilis.....{	White	12	6					6
	Colored	33	14	1				15

## FIFTEENTH BIENNIAL REPORT

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**Continued.**

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
38. Gonococcus infection.....{	White...	1	—	—	—	—	—	—
	Colored...	—	—	—	—	—	—	—
29. Cancer and other malignant tumors of the buccal cavity.....{	White...	3	—	—	—	—	—	—
	Colored...	1	—	—	—	—	—	—
40. Cancer and other malignant tumors of the stomach, liver.....{	White...	37	—	—	—	1	1	—
	Colored...	19	—	—	—	—	—	—
41. Cancer and other malignant tumors of the peritoneum, intestines, rectum.....{	White...	15	—	—	—	1	—	1
	Colored...	5	—	—	—	—	—	—
42. Cancer and other malignant tumors of female genital organs.....{	White...	34	—	—	—	—	—	—
	Colored...	25	—	—	—	—	—	—
43. Cancer and other malignant tumors of the breast.....{	White...	4	—	—	—	—	—	—
	Colored...	9	—	—	—	—	—	—
44. Cancer and other malignant tumors of the skin.....{	White...	5	—	—	—	—	—	—
	Colored...	1	—	—	—	—	—	—
45. Cancer and other malignant tumors of other organs or of organs not specified.....{	White...	20	—	—	—	—	—	—
	Colored...	10	—	—	—	—	—	—
46. Other tumors (tumors of the female geni- tal organs excepted).....{	White...	—	—	—	—	—	—	—
	Colored...	2	—	—	—	—	—	—
47. Acute articular rheumatism.....{	White...	7	—	—	—	—	—	—
	Colored...	5	—	—	—	—	—	—
48. Chronic rheumatism and gout.....{	White...	3	—	—	—	—	—	—
	Colored...	1	—	—	—	—	—	—
49. Scurvy.....{	White...	—	—	—	—	—	—	—
	Colored...	—	—	—	—	—	—	—
50. Diabetes.....{	White...	21	—	—	—	—	—	—
	Colored...	4	—	1	—	—	—	1
51. Exophthalmic goitre.....{	White...	2	—	—	—	—	—	—
	Colored...	1	—	—	—	—	—	—
52. Addison's disease.....{	White...	2	—	—	—	—	—	—
	Colored...	—	—	—	—	—	—	—
53. Leuchæmia.....{	White...	3	—	—	—	—	—	—
	Colored...	2	—	—	—	—	—	—
54. Anæmia, chlorosis.....{	White...	8	1	1	1	—	—	3
	Colored...	3	2	—	—	—	—	2
55. Other general diseases.....{	White...	5	1	1	—	—	1	3
	Colored...	—	—	—	—	—	—	—
56. Alcoholism (acute or chronic).....{	White...	9	—	—	—	—	—	—
	Colored...	3	—	—	—	—	—	—

## FIFTEENTH BIENNIAL REPORT

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*Continued.*

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
57. Chronic lead poisoning.....	White.....							
	Colored.....							
58. Other chronic occupation poisonings.....	White.....							
	Colored.....							
59. Other chronic poisonings.....	White.....	5						
	Colored.....	1						
60. Encephalitis.....	White.....	6						
	Colored.....	1						
61. Simple meningitis.....	White.....	48	14	2	2	2	2	22
	Colored.....	50	7	2	1	—	2	12
62. Locomotor ataxia.....	White.....	4						
	Colored.....	1						
63. Other diseases of the spinal cord.....	White.....	16	2	1	1	—		4
	Colored.....	7	1	—				1
64. Cerebral haemorrhage, apoplexy.....	White.....	192	2	—	—	—		2
	Colored.....	106	2	—	—	—		2
65. Softening of the brain.....	White.....	10						
	Colored.....	—						
66. Paralysis without specified cause.....	White.....	21						
	Colored.....	38	—	—	1	—		1
67. General paralysis of the insane.....	White.....	15						
	Colored.....	4	—	—	—	—		
68. Other forms of mental alienation.....	White.....	20						
	Colored.....	2	—	—	—	—		
69. Epilepsy.....	White.....	3			1	—		1
	Colored.....	*7	—	—	—	—		
70. Convulsions (nonpuerperal—5 years and over).....	White.....							
	Colored.....							
71. Convulsions of infants (under 5 years of age).....	White.....							
	Colored.....							
72. Chorea.....	White.....	2			1	—		1
	Colored.....	—	—	—	—	—		
73. Neuralgia and neuritis.....	White.....	3						
	Colored.....	—	—	—	—	—		
74. Other diseases of the nervous system.....	White.....	7		1	1	—		2
	Colored.....	1	1	—	—	—		1
75. Diseases of the eyes and their annexa.....	White.....							
	Colored.....							

\*1 Unknown race.

## FIFTEENTH BIENNIAL REPORT

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*Continued.*

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
76. Diseases of the ears.....	White							
	Colored							
77. Pericarditis.....	White	1						
	Colored	5						
78. Acute endocarditis.....	White	6	1	1				2
	Colored	6						
79. Organic diseases of the heart.....	White	268	1		1			2
	Colored	272	2	1				3
80. Agina pectoris.....	White	18						
	Colored	6						
81. Diseases of the arteries, atheroma, aneu- rysm, etc.....	White	26		1				1
	Colored	7						
82. Embolism and thrombosis.....	White	3						
	Colored	1						
83. Diseases of the veins (varices, hæmorrh- oids, phlebitis, etc.).....	White							
	Colored							
84. Diseases of the lymphatic system (lym- phangitis, etc.).....	White	1						
	Colored	2	2					2
85. Hæmorrhage; other diseases of the cir- culatory system.....	White	2						
	Colored	1						
86. Diseases of the nasal fossæ.....	White							
	Colored							
87. Diseases of the larynx.....	White	7		1	2	1	1	5
	Colored	6	3	2				5
88. Diseases of the thyroid body.....	White	2						
	Colored							
89. Acute bronchitis.....	White	9	4	2				6
	Colored	28	17	5	1	1	1	25
90. Chronic bronchitis.....	White	13	1					1
	Colored	5						
91. Bronchopneumonia .....	White	104	39	24	7	2	3	75
	Colored	119	54	23	8	3	6	94
92. Lobar pneumonia.....	White	101	12	7	6	3	3	31
	Colored	178	30	9	3	2	1	45
93. Pleurisy.....	White	7						
	Colored	6						
94. Pulmonary congestion, pulmonary apo- pœxy.....	White	8	4				1	5
	Colored	7	4					4

## FIFTEENTH BIENNIAL REPORT

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**Continued.**

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
95. Gangrene of the lungs.....	White...	-----	-----	-----	-----	-----	-----	-----
	Colored...	-----	-----	-----	-----	-----	-----	-----
96. Asthma.....	White...	10	-----	-----	-----	-----	-----	-----
	Colored...	6	-----	-----	1	-----	-----	1
97. Pulmonary emphysema.....	White...	-----	-----	-----	-----	-----	-----	-----
	Colored...	1	-----	-----	-----	-----	-----	-----
98. Other diseases of the respiratory system (tuberculosis excepted).....	White...	6	-----	-----	-----	-----	-----	-----
	Colored...	5	-----	-----	-----	-----	-----	-----
99. Diseases of the mouth and annexa.....	White...	-----	-----	-----	-----	-----	-----	-----
	Colored...	1	1	-----	-----	-----	-----	1
100. Diseases of the pharynx.....	White...	5	-----	1	-----	1	-----	2
	Colored...	3	-----	1	-----	-----	1	2
101. Diseases of the oesophagus.....	White...	1	-----	-----	-----	-----	-----	-----
	Colored...	3	-----	1	1	-----	-----	2
102. Ulcer of the stomach.....	White...	15	-----	-----	-----	1	1	2
	Colored...	4	-----	-----	-----	-----	-----	-----
103. Other diseases of the stomach (cancer ex- cepted).....	White...	22	1	-----	1	2	-----	4
	Colored...	28	1	-----	-----	-----	-----	1
104. Diarrhoea and enteritis (under 2 years)...	White...	270	173	95	2	-----	-----	270
	Colored...	*246	*186	53	6	1	-----	*246
105. Diarrhoea and enteritis (2 years and over).....	White...	89	5	-----	24	6	2	37
	Colored...	46	5	-----	7	8	4	24
106. Hookworm.....	White...	-----	-----	-----	-----	-----	-----	-----
	Colored...	2	-----	-----	-----	-----	-----	-----
107. Intestinal parasites.....	White...	1	-----	-----	-----	-----	-----	-----
	Colored...	-----	-----	-----	-----	-----	-----	-----
108. Appendicitis and typhlitis.....	White...	51	-----	1	-----	1	2	-----
	Colored...	17	-----	-----	-----	-----	-----	-----
109. Hernia, intestinal obstruction.....	White...	23	3	2	1	-----	-----	6
	Colored...	14	2	-----	1	-----	-----	3
110. Other diseases of the intestines.....	White...	4	1	-----	-----	-----	-----	1
	Colored...	3	2	-----	-----	-----	-----	2
111. Acute yellow atrophy of the liver.....	White...	5	-----	-----	-----	-----	-----	-----
	Colored...	-----	-----	-----	-----	-----	-----	-----
112. Hydatid tumor of the liver.....	White...	-----	-----	-----	-----	-----	-----	-----
	Colored...	-----	-----	-----	-----	-----	-----	-----
113. Cirrhosis of the liver.....	White...	19	-----	-----	-----	-----	-----	-----
	Colored...	12	-----	-----	-----	-----	-----	-----

## FIFTEENTH BIENNIAL REPORT

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*Continued.*

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
114. Biliary calculi.....	White....	14						
	Colored.....							
115. Other diseases of the liver.....	White....	10						
	Colored.....	5						
116. Diseases of the spleen.....	White....							
	Colored.....							
117. Simple peritonitis (nonpuerperal).....	White....	6						
	Colored.....	6						
118. Other diseases of the digestive system (cancer and tuberculosis excepted).....	White....							
	Colored.....							
119. Acute nephritis.....	White....	31	2	3	1	2		8
	Colored.....	44	3	5	1	2		11
120. Bright's disease.....	White....	202	1	1	2		1	5
	Colored.....	*156		1	2			3
121. Chyluria.....	White....							
	Colored.....							
122. Other disease of the kidneys and annexa.....	White....	4						
	Colored.....	1						
123. Calculi of the urinary passages.....	White....	2						
	Colored.....	1						
124. Diseases of the bladder.....	White....	3						
	Colored.....	6		1				1
125. Diseases of the urethra, urinary ab- scess, etc.....	White....	1						
	Colored.....	4						
126. Diseases of the prostate.....	White....	6						
	Colored.....	8						
127. Nonvenereal diseases of the male genital organs.....	White....	1						
	Colored.....	1						
128. Uterine hemorrhage (nonpuerperal).....	White....							
	Colored.....	1						
129. Uterine tumor (noncancerous).....	White....	3						
	Colored.....	6						
130. Other diseases of the uterus.....	White....	2						
	Colored.....	4						
131. Cysts and other tumors of the ovary.....	White....							
	Colored.....	5	1					1
132. Salpingitis and other diseases of the fe- male genital organs.....	White....	3						
	Colored.....	4						

## FIFTEENTH BIENNIAL REPORT

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*Continued.*

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
133. Nonpuerperal diseases of the breast (cancer excepted).....	White.....	1						
	Colored.....							
134. Accidents of pregnancy.....	White.....	10						
	Colored.....	3						
135. Puerperal haemorrhage.....	White.....	3						
	Colored.....	6						
136. Other accidents of labor.....	White.....	6						
	Colored.....	7						
137. Puerperal septichæmia.....	White.....	8						
	Colored.....	18						
138. Puerperal albuminuria and convulsions.....	White.....	21						
	Colored.....	16						
139. Puerperal phlegmasia, alba dolens, embolus, sudden death.....	White.....							
	Colored.....							
140. Following childbirth (not otherwise defined).....	White.....	1						
	Colored.....	2						
141. Puerperal diseases of the breast.....	White.....							
	Colored.....							
142. Gangrene.....	White.....	8		1				1
	Colored.....	2						
143. Furuncle.....	White.....							
	Colored.....							
144. Acute abscess.....	White.....	2		1				1
	Colored.....							
145. Other diseases of the skin and adnexa.....	White.....							
	Colored.....	4		2				2
146. Diseases of the bones (tuberculosis excepted).....	White.....	7		1	1			2
	Colored.....	2		2				2
147. Diseases of the joints (tuberculosis and rheumatism excepted).....	White.....							
	Colored.....							
148. Amputations.....	White.....	1						
	Colored.....							
149. Other diseases of the organs of locomotion.....	White.....							
	Colored.....							
150. Congenital malformations (stillbirths not included).....	White.....	34	33	1				34
	Colored.....	10	10					10
151. Congenital debility, icterus, and sclerema.....	White.....	236	236					236
	Colored.....	**134	**134					**134

\*\*2 Unknown race.

## FIFTEENTH BIENNIAL REPORT

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**Continued.**

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
152. Other causes peculiar to early infancy.....{	White...	20	20					20
	Colored...	22	21	1				22
153. Lack of care.....{	White...	*1	*1					*1
	Colored...							
154. Senility.....{	White...	47						
	Colored...	29						
155. Suicide by poison.....{	White...	5						
	Colored...	1						
156. Suicide by asphyxia.....{	White...							
	Colored...							
157. Suicide by hanging or strangulation.....{	White...	3						
	Colored...							
158. Suicide by drowning.....{	White...							
	Colored...	1						
159. Suicide by firearms.....{	White...	16						
	Colored...	2						
160. Suicide by cutting or piercing instruments{	White...	3						
	Colored...							
161. Suicide by jumping from high places.....{	White...							
	Colored...							
162. Suicide by crushing.....{	White...							
	Colored...							
163. Other suicides.....{	White...	1						
	Colored...	1						
164. Poisoning by food.....{	White...	5		1	1			2
	Colored...	1						
165. Other acute poisonings.....{	White...	9	2	1	1			4
	Colored...	5	1	1	1			3
166. Conflagration.....{	White...	1						
	Colored...	2						
167. Burns (conflagration excepted).....{	White...	21	1	3	3	2	1	10
	Colored...	33	1	1	3	5	4	14
168. Absorption of deleterious gases (confia- gration excepted).....{	White...	5	3					3
	Colored...	5	3	1				4
169. Accidental drowning.....{	White...	6		1	1			2
	Colored...	9						
170. Traumatism by firearms.....{	White...	9		1				1
	Colored...	13						
171. Traumatism by cutting or piercing instru- ments.....{	White...	1						
	Colored...							

## FIFTEENTH BIENNIAL REPORT

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*Continued.*

TABLE VI.—

Diseases	Race	Total	Under 1	1	2	3	4	Total under 5
172. Traumatism by fall.....{	White...	13		1				1
	Colored...	8	1					1
173. Traumatism in mines and quarries.....{	White...	1						
	Colored...	1						
174. Traumatism by machines.....{	White...	2						
	Colored...							
175. Traumatism by other crushing (vehicles, railways, landslides, etc.) .....	White...	36		1				1
	Colored...	25	1			1		2
176. Injuries by animals.....{	White...	1						
	Colored...							
177. Starvation.....{	White...	3	2					2
	Colored...	1			1			1
178. Excessive cold.....{	White...							
	Colored...							
179. Excessive heat.....{	White...	1						
	Colored...	3	1					1
180. Lightning .....	White...	2						
	Colored...	1						
181. Electricity (lightning excepted).....{	White...	3						
	Colored...	4						
182. Homicide by firearms.....{	White...	20						
	Colored...	62						
183. Homicide by cutting or piercing instru- ments.....{	White...							
	Colored...	9						
184. Homicide by other means.....{	White...	1						
	Colored...	7						
185. Fractures (cause not specified).....{	White...	19					1	1
	Colored...	9						
186. Other external violence.....{	White...	9	3	1		1		5
	Colored...	8	1					1
187. Ill defined organic disease.....{	White...							
	Colored...	1						
188. Sudden death.....{	White...	6	2					2
	Colored...	8						
189. Cause of death not specified or ill defined.....{	White...	96	56	1	4	2		63
	Colored...	*††172	*††95	5	2	2	1	*††105

\*1 unknown race.

†2 unknown race.

‡1 unknown sex.

## FIFTEENTH BIENNIAL REPORT

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*Continued.*

TABLE VII.—STATISTICAL STUDY OF PELLAGRA IN NORTH CAROLINA.

TABLES OF DEATHS FROM PELLAGRA IN THE REGISTRATION AREA\* OF NORTH CAROLINA DURING THE YEAR 1913, BY RACE AND SEX.

Race and Sex		Total		Section of the State		Conjugal Relation				
				Piedmont Section	Western Section	Single	Married	Widowed	Divorced	Unknown
White.....	Male.....	39	3	36	3	5	24	10		
	Female .....	52	10	39	3	9	29	14		
Colored.....	Male.....	10	2	7	1	4	5	1		
	Female .....	57	17	37	3	13	28	14	1	
Race and Sex		Total		Nativity		Nativity of Parents				
		N. C.	U. S.	Foreign	Unknown	N. C.	U. S.	Foreign	Unknown	Mixed Parentage
White.....	Male.....	39	29	8	1	1	24	3		5
	Female .....	52	44	7		1	32	4		6
Colored.....	Male.....	10	8	2		2	2	2		6
	Female .....	57	48	7		2	33	9	7	2

\*Registration area of North Carolina includes all towns having a population of 1,000 or over in 1900.

## FIFTEENTH BIENNIAL REPORT

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TABLES OF DEATHS FROM PELLAGRA—Continued.

Race and Sex	Total	Month of Occurrences												Resident Yes	Non- Resident Yes
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		
White.	39	3	2	5	3	3	5	5	5	1	2	2	3	39	2
	62	1	6	5	4	7	9	7	4	3	4	3	50	50	2
Colored.	10	1	1	2	1	1	4	4	4	1	1	3	3	10	57
	57	1	2	3	3	3	7	14	8	2	6	5	5	57	57

## NORTH CAROLINA BOARD OF HEALTH

TABLE IX.—OCCUPIED MALES—NUMBER AND DISTRIBUTION, BY IMPORTANT CAUSES OF DEATH, OF MALES ENGAGED IN CERTAIN SPECIFIED OCCUPATIONS, FOR THE REGISTRATION AREA\* OF NORTH CAROLINA, FOR THE YEAR 1913, BY RACES.

Occupations	Race	Total	Number of Deaths from Certain Important Causes							
			Typhoid Fever	Tuberculosis of Lungs	Cancer	Apolioxy and Paralysis	Heart Disease	Pneumonia	Bright's Disease	Pellagra
1. All occupations reported.....	White....	807	69	171	32	128	139	95	134	39
	Colored....	719	58	171	16	69	131	167	108	10
2. Professional.....	White....	39	3	13	2	1	11	1	8	1
	Colored....	20	—	4	1	3	6	2	3	1
3. Clerical and official.....	White....	29	3	7	—	4	7	1	5	2
	Colored....	3	—	—	—	1	—	1	1	—
4. Bookkeepers, clerks, copyists, and stenographers.....	White....	57	8	21	2	5	10	2	8	1
	Colored....	—	—	—	—	—	—	—	—	—
5. Mercantile and trading.....	White....	6	1	1	—	1	—	—	2	—
	Colored....	—	—	—	—	—	—	—	—	—
6. Merchants and dealers.....	White....	78	1	22	7	12	14	3	16	3
	Colored....	9	—	2	2	—	2	1	2	—
7. Public entertainment.....	White....	5	—	1	1	1	2	—	4	—
	Colored....	21	1	7	1	4	3	—	—	—
8. Personal service, police and military.....	White....	3	—	1	1	—	—	—	1	—
	Colored....	3	—	1	—	—	—	1	—	—
9. Janitors, sextons, porters, waiters, and cooks.....	White....	3	—	20	—	4	—	1	1	1
	Colored....	34	2	—	—	—	—	4	3	1

## FIFTEENTH BIENNIAL REPORT

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10. Laboring and servant.....	White... Colored.	31 236	2 15	4 49	6	6 28	6 60	4 42	7 37	2 4
11. Manufacturing and mechanical industry.....	White... Colored.	53 21	4 6	14 6	2	10 4	7 7	4 2	10 2	2 2
12. Carpenters and joiners.....	White... Colored.	56 54	6 3	9 8	1	12 6	13 14	1 7	8 16	6 6
13. Cigar makers and tobacco workers.....	White... Colored.	9 36	1 5	2 15	1	1 2	1 4	1 5	3 5	3 3
14. Mill and factory operatives (textiles).....	White... Colored.	46 10	4 2	18 1	1	9 2	6 3	6 2	5 1	3 1
15. Agriculture, transportation and other outdoor.....	White... Colored.	49 34	5 4	13 12	1	4 5	11 7	3 4	11 2	1 1
16. Draymen, hackmen, teamsters, etc.....	White... Colored.	11 36	2 3	2 11	1	4 6	2 8	1 1	7 7	1 1
17. Farmers, planters, and farm laborers.....	White... Colored.	108 47	5 9	17 9	9	27 5	24 5	4 7	15 10	7 7
18. No occupations stated.....	White... Colored.	225 155	24 14	26 27	5 1	31 8	30 7	65 79	34 16	10 3

\*Registration area of North Carolina includes all towns having a population of 1,000 or over in 1900.

TABLE X.—OCCUPIED FEMALES—NUMBER AND DISTRIBUTION, BY IMPORTANT CAUSES OF DEATH, OF FEMALES ENGAGED IN CERTAIN SPECIFIED OCCUPATIONS FOR THE REGISTRATION AREA\* OF NORTH CAROLINA FOR THE YEAR 1913, BY RACES.

Occupations	Race	Total	Typhoid Fever	Number of Deaths from Certain Important Causes						
				Tuberculosis of Lungs	Cancer	Apoplexy and Paralysis	Heart Disease	Pneumonia	Bright's Disease	Pellagra
1. All occupations reported.....	White	847	66	193	86	111	129	110	100	53
	Colored	833	51	241	55	77	141	140	91	57
2. Musicians and teachers of music.....	White	2	—	1	1	—	—	—	—	—
	Colored	—	—	—	—	—	—	—	—	—
3. Teachers in school.....	White	6	—	3	2	—	1	—	—	—
	Colored	7	—	6	1	—	1	—	—	—
4. Stenographers and typewriters.....	White	3	2	1	—	—	—	—	—	—
	Colored	—	—	—	—	—	—	—	—	—
5. Bookkeepers, copyists and clerks.....	White	1	1	—	—	—	—	—	—	—
	Colored	—	—	—	—	—	—	—	—	—
6. Laundresses.....	White	53	3	18	6	4	10	3	7	2
	Colored	—	—	—	—	—	—	—	—	—
7. Nurses and midwives.....	White	—	—	7	4	1	—	5	1	1
	Colored	19	—	—	—	—	—	—	—	—
8. Cooks and servants.....	White	2	—	1	—	—	—	1	—	—
	Colored	122	7	28	3	15	21	14	22	12
9. Cigar makers and tobacco workers.....	White	3	—	2	—	4	6	1	—	1
	Colored	29	1	8	—	—	—	5	2	—

10. Mill and factory operatives (textiles).....	White... Colored.	29 4	3 4	19 4	2 1	2 1	2 1	3 2
11. Dressmakers and seamstresses.....	White... Colored.	15 3	— —	4 1	1 1	4 1	— —	3 2
12. All other occupations.....	White... Colored.	— 1	— —	— —	— 1	— —	— —	— —
13. No occupations stated.....	White... Colored.	378 220	31 22	69 63	37 4	47 8	56 19	47 84
14. Housewives.....	White... Colored.	408 †385	29 118	93 107	43 33	60 45	70 79	50 32

\*Registration area of North Carolina includes all towns having a population of 1,000 and over in 1900. †2 unknown race.

TABLE VII.—DEATHS FROM IMPORTANT CAUSES BY MONTHS OF OCCURRENCE FOR THE REGISTRATION AREA OF NORTH CAROLINA FOR THE YEAR 1913,  
BY RACES.

Disease	Race	Total	Month of Occurrence											
			January	February	March	April	May	June	July	August	September	October	November	December
Typhoid.....	White...	135	4	3	1	4	3	14	25	28	21	16	9	7
	Colored...	*109	5	1	4	7	5	8	23	16	*13	13	8	6
Malaria.....	White...	25	1	—	—	2	1	1	3	6	3	4	4	—
	Colored...	41	—	—	2	1	2	6	6	5	10	7	—	2
Measles.....	White...	80	4	11	13	11	21	6	5	2	4	3	—	—
	Colored...	25	—	4	3	8	6	1	2	—	—	—	—	1
Scarlet fever.....	White...	4	1	—	1	1	—	—	1	—	—	—	—	1
	Colored...	2	1	—	—	—	—	—	—	—	—	—	—	—
Whooping cough.....	White...	68	1	3	11	12	10	5	7	7	2	3	1	6
	Colored...	*61	3	4	4	2	7	9	7	14	4	*2	2	3
Diphtheria and croup.....	White...	31	3	2	—	—	—	1	1	2	1	6	8	8
	Colored...	16	3	1	—	2	—	1	1	—	2	3	2	1
Influenza.....	White...	40	10	4	7	3	2	—	—	1	1	2	4	6
	Colored...	29	7	4	8	6	—	1	—	—	—	—	—	3
Tuberculosis of the lungs.....	White...	364	31	38	33	41	18	29	33	33	21	24	29	34
	Colored...	412	28	35	42	36	36	27	42	32	30	40	35	29
Other forms of tuberculosis.....	White...	65	2	5	3	3	5	6	6	8	6	6	10	5
	Colored...	67	5	5	4	3	8	9	5	2	6	7	4	9
Meningitis.....	White...	48	4	8	4	4	4	2	5	3	2	4	3	5
	Colored...	50	14	8	9	1	6	—	1	4	—	5	—	2
Pneumonia.....	White...	205	30	31	30	10	13	6	9	4	6	10	27	29
	Colored...	297	44	41	34	29	20	8	11	7	11	14	33	45
Diarrhoea and enteritis (under 2 years).....	White...	272	2	8	4	13	53	63	48	30	11	20	12	8
	Colored...	246	10	5	8	15	43	40	41	28	28	13	8	7
Violent deaths (excluding suicide).....	White...	127	5	10	14	7	13	13	8	12	14	7	14	10
	Colored...	160	16	11	13	3	9	17	17	14	11	19	13	17
Suicide.....	White...	28	1	1	3	5	1	—	1	2	3	1	3	7
	Colored...	5	1	2	—	—	—	2	—	—	—	—	—	—

\*1 Unknown race.

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